

1.0 INTRODUCTION

The Arizona Department of Transportation (ADOT), the Arizona Game & Fish Department (AGFD), and the Arizona State Parks Board (ASPB) are required, under Arizona Revised Statutes (Sec. 28-1502.01), to conduct a study every three years on watercraft fuel consumption and recreational watercraft usage. The primary purposes of this effort are as follows:

- ! To determine the percentage of total state taxes paid to Arizona for motor vehicle fuel that is used for propelling watercraft; and
- ! To determine the number of days of recreational watercraft use in each of the state's counties by boat use days and person use days.

The fuel consumption data is collected to determine the allocation of motor vehicle fuel tax to the State Lake Improvement Fund (SLIF). The information on recreational watercraft usage patterns on Arizona's lakes and rivers is necessary, in part, to determine the distribution of SLIF funds to applicants.

In addition to collecting the above mandated information, this study also collected selected attitudinal and behavioral data on the following subjects:

- ! Water-based and non-water-based recreational activities participated in;
- ! Boating and water-based recreational facility needs;
- ! SLIF fund utilization priorities;
- ! Adequacy and focus of watercraft law enforcement activities; and
- ! Attitudes about selected watercraft and outdoor recreation issues.

The information contained in this report is based on two key study components:

- ! A statistically valid and projectable telephone survey of 6,462 registered watercraft owners in Arizona, California, and Nevada;
- ! An audit/survey of the fuel sales and consumption patterns of: (1) marinas; (2) public agencies, and (3) concessionaires, commercial boat operators and excursion operators.

In addition to the boat owner surveys and the marina, agency and concessionary audits, this study also included a launch ramp survey. The launch ramp survey was conducted to check the ratio of in-state to out-of-state boaters at ten selected Arizona lakes and rivers.

The methodology utilized on the boat owner segment of this study paralleled the methodology used by BRC in the 1994, 1997, and 2000 Watercraft Studies. The one exception to this is that unlike the 2000 study, this study did not include Utah boaters since the State of Utah would not release their boat owner database for use in this study.

To develop the most accurate data possible, the data collection effort was divided into 24 separate data collection segments spread over the 12-month period from May 16, 2002 to May 8, 2003. Using this format, a total of approximately 534 interviews were conducted each month with one-half being conducted between roughly the 1st and 5th of the month and one-half between roughly the 16th and 20th of the month. During each of the 24 interviewing segments, boaters were asked to recall their boating patterns for only the two weeks prior to the interview.

This study was designed and executed under the direction of a Technical Advisory Committee (TAC) comprised of representatives from each sponsoring agency. The Behavior Research Center (BRC) wishes to thank each of the following TAC members for their indispensable assistance in the successful completion of this most important project:

- ! John Semmens, ADOT
- ! Tanna Thornburg, ASPB
- ! Stephanie Sandrock, ASPB
- ! Ty Gray, AGFD

The information generated from this study is presented in two volumes. **VOLUME I - EXECUTIVE SUMMARY** presents a brief summary review of the key study findings and the methodology employed. **VOLUME II - TECHNICAL REPORT** presents an in-depth analysis of the study findings and a detailed explanation of the study methodology.

The Behavior Research Center has presented all of the data germane to the basic research objectives of the project. However, if the TAC requires additional data retrieval or interpretation, we stand ready to provide such input.

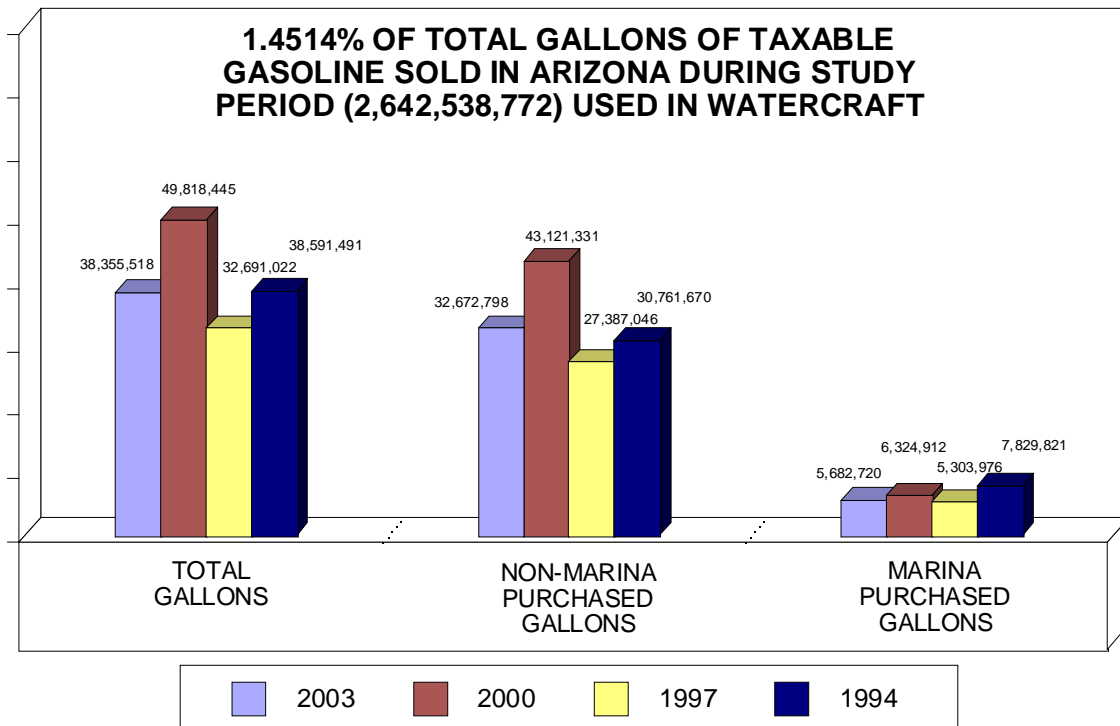
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2.0 SUMMARY OF THE FINDINGS

FUEL CONSUMPTION DATA

Total gasoline used to propel watercraft in the state of Arizona between May 1, 2002 and June 30, 2003 was 38,355,518 gallons. This total represents 1.4514 percent of the total 2,642,538,772 gallons of taxable gasoline sold in Arizona during the study period. This is the percentage which should be used for the SLIF allocation.

WATERCRAFT FUEL CONSUMPTION OF ARIZONA GASOLINE



The 2003 SLIF allocation of 1.4514 is down noticeably from the 2000 percentage of 2.0328. The primary reasons for the decrease from 2000 are as follows:

- The percent of boaters who used their watercraft on Arizona lakes and rivers in the prior two weeks decreased from 8.9 percent in 2000 to 8.0 percent in 2003.
- The average number of days boaters used their watercraft on Arizona lakes and river in the prior two weeks decreased from 3.5 days in 2000 to 3.4 days in 2003.
- Consumption of Arizona fuel by California and Nevada boaters decreased between 2000 and 2003 (83.6% of California boaters purchased Arizona fuel in 2000 compared to only 72.8% in 2003; 42.0% of Nevada boaters purchased Arizona fuel in 2000 compared to only 21.6% in 2003).
- The number of gallons of Arizona fuel boaters purchased in the prior two weeks decreased between 2000 and 2003 (Arizona boaters purchased 40.9 gallons in 2000 compared to 36.4 gallons in 2003; California boaters 42.1 gallons in 2000 compared to 36.7 gallons in 2003; Nevada boaters 15.9 gallons in 2000 compared to 15.2 gallons in 2003).

The boating classification which continues to account for the largest amount of non-marina consumption is Class 2 (47.3%) which is made up predominantly of jet skis. This figure is up from 41.5 percent in 2000. Among California boaters this class accounts for 67.7 percent of consumption.

Gasoline is used to propel 98 percent of all boats, with the remainder utilizing diesel and aviation fuel.

95 percent of Arizona boaters purchase Arizona fuel compared to 73 percent of California boaters, and 22 percent of Nevada boaters. These figures represent a slight increase since the 2000 Survey among Arizona boaters (from 89.8% to 95.1%) and major decreases among California boaters (from 83.6% to 72.8%) and Nevada boaters (from 42.0% to 21.6%).

88 percent of Arizona boaters purchase their Arizona fuel at a non-marina location compared to 85 percent of California boaters, and 69 percent of Nevada boaters. Marina purchasing reaches its highest level among Nevada boaters (31%).

USE OF WATERCRAFT IN ARIZONA

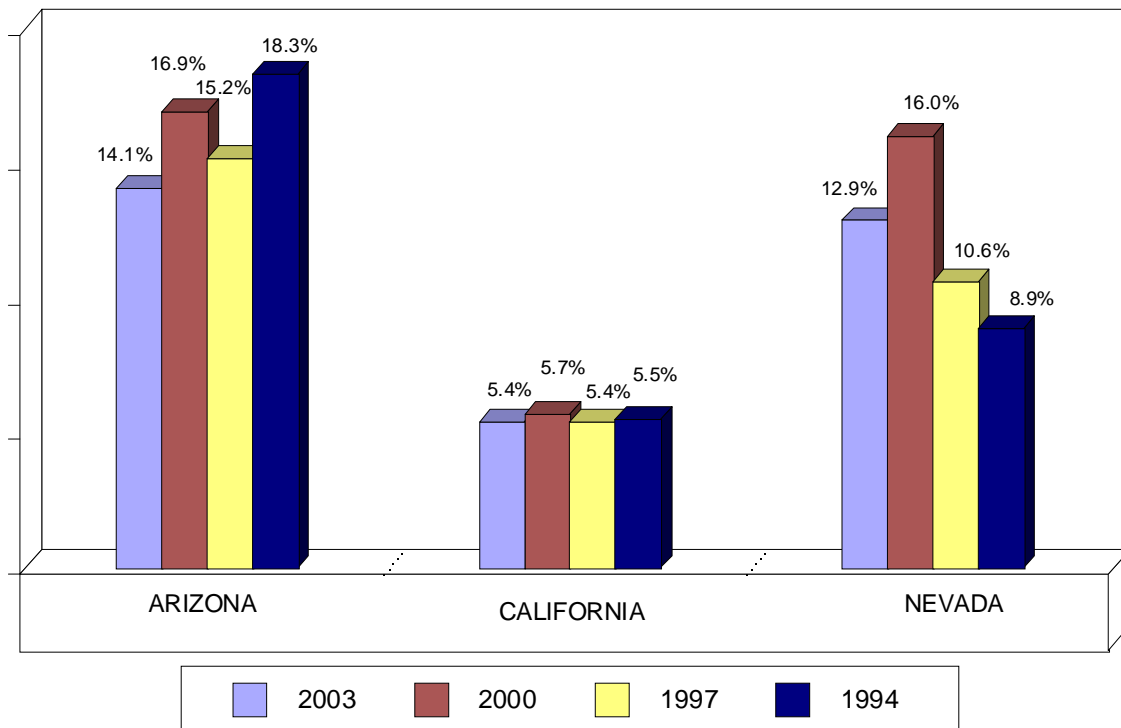
8.0 percent of registered watercraft owners in Arizona, California and Nevada use their boats in Arizona during any given two week period -- down from 8.9 percent in 2000. Among Arizona watercraft owners, usage reaches 14.1 percent -- down from 16.9 percent in 2000.

As might be expected, the Arizona usage figure is above those for the other two states studied with 5.4 percent of California owners, 12.9 percent of Nevada owners indicating use in Arizona during any two-week period. The percentage of California owners using their boats is down from 2000 (5.7%), as is the percentage among Nevada owners (16.0%).

As noted in the previous studies, while the California use figure may look minimal compared to Arizona's, this is not the case due to the sheer volume of boats registered in California. For example, the California two-week use figure translates into 20,316 California owners using Arizona lakes and rivers (5.4% of 376,230 total owners). The comparable number for Arizona is nearly identical at 20,354 (14.1% of 144,354).

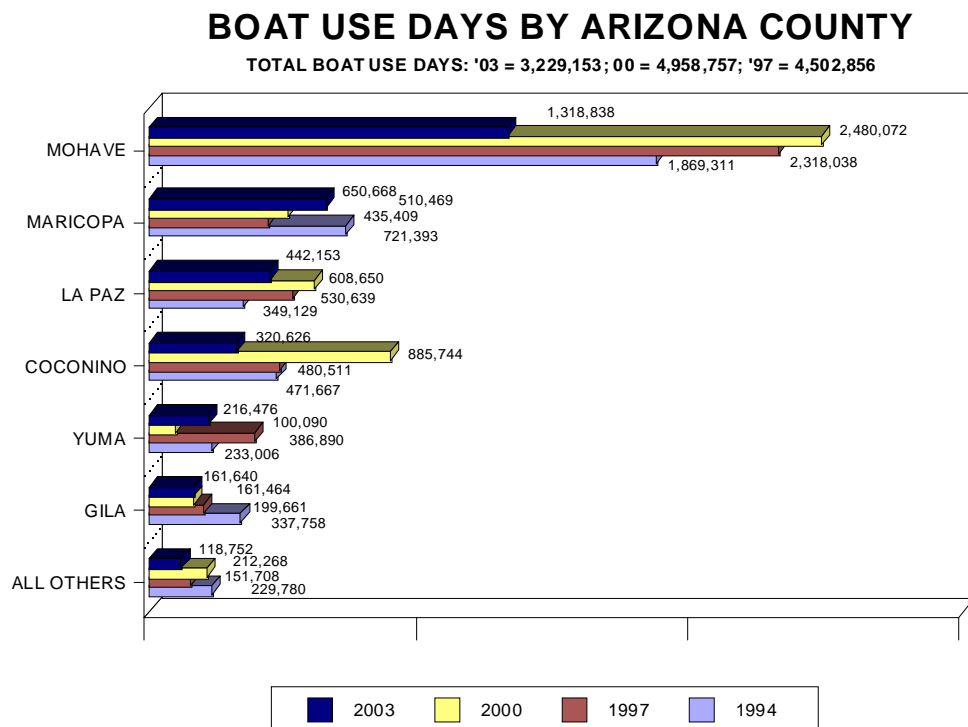
40.6 percent of all watercraft owners in the three state survey universe utilized their boat in Arizona during the prior year -- up from 37.8 percent in 2000. Among Arizona users the figure reaches 61.4 percent compared to 32.3 percent among California owners and 46.4 percent among Nevada owners.

BOAT USE IN ARIZONA IN ANY GIVEN 2-WEEK PERIOD



Total boat use days in 2003 were 3,229,153, a 35 percent decrease over the 4,958,757 boat use days recorded in 2000. Similar to the prior three studies, Mohave County is the dominant boating location in Arizona with 40.8 percent of total boat use days – down from 50.0 percent in 2000. The study also reveals a 64 percent decrease in boat use days in Coconino County – 320,626 in 2003 vs. 885,744 in 2000 – and a 27 percent decline in boat use days in La Paz County – 442,153 in 2003 vs. 608,650 in 2000. The primary reasons behind the decrease in Coconino County are the exclusion of Utah boaters into this study and decreased use of Lake Powell by boaters from each of the included states. The primary reason for the decline in La Paz County is much lower use of the county's waterways by California boaters.

The data also reveals a 27 percent increase in boat use days in Maricopa County and a 116 percent increase in boat use days in Yuma County. The Maricopa increase is due to a increased Arizona boater use while the Yuma increase is due to increased California boater use.



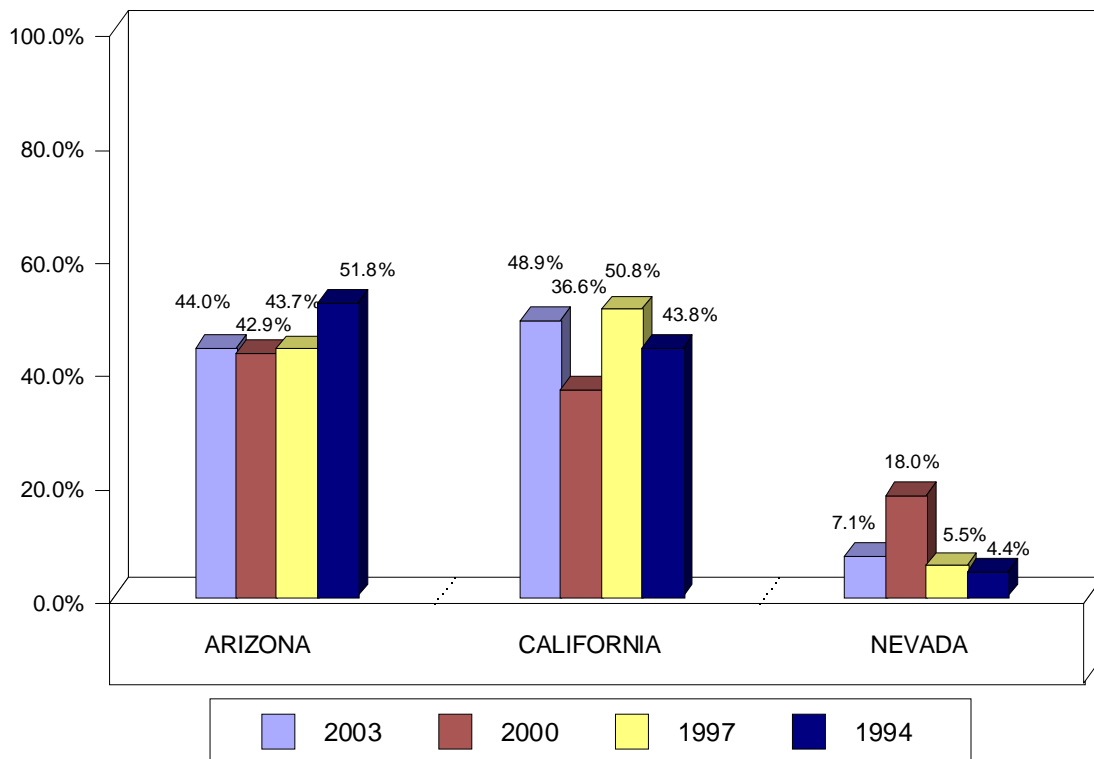
Person use days decreased from 22,885,059 in 2000 to 14,781,894 in 2003 – a 35 percent drop. As in the case with boat use days, Mohave County is the dominant boating location in Arizona accounting for 43.5 percent of all person use days.

California boaters account for 48.9 percent of boat use days followed by Arizona boaters with 44.0 percent and Nevada boaters with 7.1 percent. These figures represent decreases in boat use days among boaters from each of the three states included in this study.

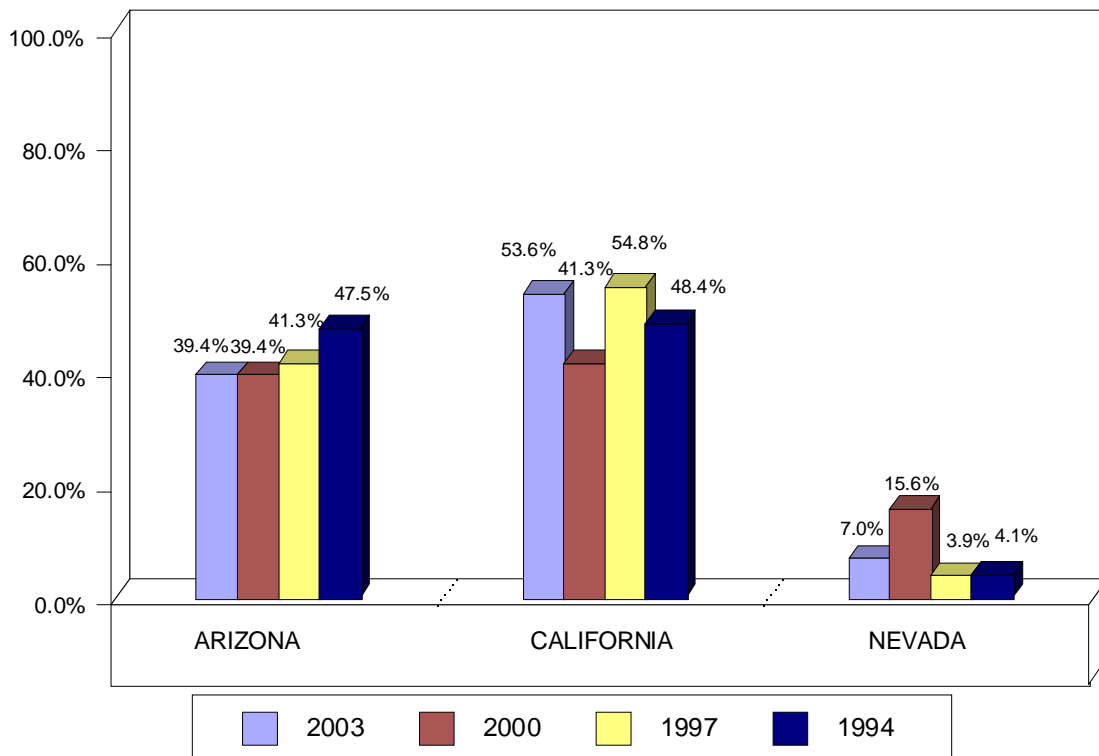
California boaters also account for the largest share of person use days. Thus we find that California boaters account for 53.6 percent of person use days followed by 39.4 percent for Arizona boaters and 7.0 percent for Nevada boaters. The primary reason for California's high percentage is the fact that California boaters tend to have larger boating parties.

Lake Havasu continues to be the state's most utilized lake in terms of both boat use days (679,273) and person use days (3,265,670).

BOAT USE DAYS BY STATE



PERSON USE DAYS BY STATE



ADDITIONAL BOATING DATA

- ! The average daily expenditure for a boating trip in Arizona is \$212. The typical Arizona boater spends \$151 per day compared to \$381 for California boaters and \$75 for Nevada boaters.
- ! Launch ramps (22%) and public restrooms (21%) continue to be the most frequently mentioned needed facilities at boaters' favorite lakes.
- ! When boaters are asked to evaluate each of 22 specific boating and water-based recreational facilities at their favorite lake, the facility registering the highest net positive reading continues to be paved access roads (+40%). Informational signs receives the next highest net positive reading (+30%), followed by launching ramps (+26%) and parking facilities for vehicles (26%). Three items register net negative readings from roughly one-fifth of boaters or more: emergency telephones (-28%), drinking water outlets (-25%) and trash dumpsters accessible by boat (-20%).
- ! Nine percent of boaters are aware of the SLIF program, similar to the ten percent recorded in 2000 and eight percent in 1997. As might be expected, awareness is highest in Arizona with a reading of 12 percent.

- When boaters are asked if they feel the program's funds should be used mostly for renovations or new building, a majority of boaters select renovations over new building -- 53 percent vs. 27 percent. This reading for renovation is virtually unchanged from the 2000 reading.
- When boaters are asked how important they feel each of six SLIF funding functions are, four of the functions are rated very or somewhat important by over eight out of ten boaters: 1) the construction of first-aid stations and other safety facilities (88%); 2) the purchasing of law enforcement and safety equipment such as patrol boats, radios and lights (87%); 3) the construction of recreation support facilities such as restrooms, campgrounds and picnic tables (86%); and 4) the construction of water-based boating facilities such as marinas, launch ramps and piers (85%). These four functions have remained at the top of the importance list over the past three studies.
- A new question was added to the 2000 study to determine boaters' preferences for the uses of a new lake, should one be developed. Seven different boating activities were evaluated and, as was the case in 2000, four received ratings of very or somewhat important by more than 80 percent of the boaters: 1) general pleasure boating (94%); 2) fishing (91%); 3) water skiing (84%); 4) power boating (83%). Jet skiing again received the lowest preference rating with 59 percent of boaters offering a very or somewhat important rating.

Stopping people who are boating while drunk (55%) and stopping people who are boating recklessly (53%) continue to be the two law enforcement activities which boaters would most like to see increased at their favorite lake or river. Also relating to law enforcement and safety issues at Arizona lakes, roughly eight out of ten boaters or more agree with the following attitudes:

- That hands-on training should be required for boat rental customers (87%).
- That penalties for operating a boat under the influence of drug or alcohol should be the same as those for motor vehicles (86%).
- That boating law violators should be required to take a boating safety class (84%).
- That the minimum age for boat operators should be higher than 12 years old (80%).
- That laws and regulations are being adequately enforced (79%).

Eight out of ten boaters (79%) support boating safety educational centers at Arizona lakes – virtually unchanged from 80 percent in 2000.

A majority of boaters (60%) do not believe their favorite lake is too crowded while 37 percent do. This represents a negative shift of three points (“too crowded”) since 2000.

- ! 57 percent of boaters would support designating special areas for use only by jet skis – down three points from 2000.
- ! Nearly six out of ten boaters (57%) would like more information on boating opportunities in Arizona – up one point since 2000.
- ! A majority of boaters (51%) believe their favorite lake needs additional developed campgrounds - down from 55 percent in 2000 - and that it needs additional primitive campgrounds (50%) – also down from 55 percent in 2000.
- ! 46 percent of boaters believe their favorite lake needs additional RV hookup while an equal percent do not. This agree level is virtually unchanged since 2000
- ! Boaters continue to be split on whether the launch ramps at their favorite lake are too crowded (48% agree, 47% disagree) and whether the number of people using a lake should be restricted during high use periods (46% agree, 49% disagree). These readings are virtually unchanged since 2000.
- ! Boaters' single favorite boating activities continue to be waterskiing (27%) and fishing (25%). Fishing reveals particular appeal among Arizona boaters (41%) while waterskiing (31%) reveals particular appeal among California boaters.

3.0 RESEARCH METHODOLOGY

3.1 Introduction

To properly address the Departments' informational needs, it was necessary to collect information from a variety of population universes which either consume or sell Arizona fuel or utilize Arizona's lakes and rivers for recreational purposes. The specific universes studied during the course of this project were as follows:

Surveyed Universes:

- ! Arizona registered owners;
- ! Non-Arizona registered boat owners who utilize Arizona's lakes and rivers;

Audited/Surveyed Universes:

- ! Concessionaires, commercial boat operators and excursion operators who consume Arizona fuel;
- ! Public agencies which consume Arizona fuel; and
- ! Marinas servicing Arizona lakes and rivers which sell fuel.

The purpose of this section of the report is to address the procedures followed to collect the necessary information from these universes.

3.2 Boat Owner Survey — Sample Selection

In order to get an accurate picture of boaters' use of Arizona's lakes and rivers, this project component utilized a very large random sample of 6,462 Arizona, California and Nevada watercraft owners. A sample of this size is very unusual but was deemed necessary for this project due to its importance.

The sample of 6,462 watercraft owners utilized on this project component represents 1.19 percent of the 544,821 owners in the three-state region studied. As an example of how large this 1.19 percent sample of the total universe is, the typical statewide Arizona sample consists of approximately 800 respondents, or .04 percent of Arizona's estimated 2,059,600 households, while the typical national United States sample consists of 1,500 respondents, or .0014 percent of the United States' estimated 109,440,059 households.

The following several pages of this report offer a detailed description on how the boat owner survey was conducted.

To determine the percentage of all fuel sold in Arizona attributable to propelling watercraft, it was first necessary to determine the total number of gallons sold to watercraft within the state. To arrive at this figure, the consumption patterns of two distinct user groups were studied: (1) Arizona registered boats for which gasoline is purchased in Arizona, and; (2) non-Arizona registered boats for which gasoline is purchased in Arizona.

A total of 6,462 Arizona and non-Arizona registered boat owners stratified by boat class were systematically random-sampled via telephone from current boat registration lists obtained from each state included in the study (Arizona Game and Fish Department, California Department of Motor Vehicles, Nevada Division of Wildlife) to determine their fuel consumption of and usage patterns during the study period. These figures were then projected to total boat registrations and the findings presented later in this report were calculated. The non-Arizona boaters' sample was drawn from the neighboring California counties of Imperial, Los Angeles, Orange, Riverside, San Diego and San Bernardino and the Nevada county of Clark. Unlike the 2000 study, this study did not include surveys with Utah boaters. The reason for this is that a database of Utah boaters could not be obtained from the State of Utah.

As may be seen on the following table, a total of 544,821 watercraft are registered in the sample universe. Of this total, 69.1 percent are located in California while 26.5 percent are located in Arizona and 4.4 percent in Nevada.

In addition to the sheer volume of watercraft California contributes to the sample universe several other interesting findings are also worth noting in Table 1:

Arizona Watercraft:

- ! High proportions of watercraft in classes 1 (under 16' outboard) and 4 (16' to 25' outboards); and
- ! Low proportion of watercraft in class 2 (under 16' in & in/out which is predominately jet skis).

California Watercraft:

- ! High proportion of class 2 watercraft (33.2% compared to 19.0% in Arizona and 25.4% in Nevada).

Nevada Watercraft:

- ! High proportion of watercraft in class 5 (16' to 25' in/out & in) and class 8 (over 25' in & in/out).

TABLE 1: WATERCRAFT POPULATION IN SAMPLE

BOAT CLASS	STATE OF REGISTRATION						TOTAL	
	ARIZONA		CALIFORNIA		NEVADA		Number	%
	Number	%	Number	%	Number	%	Number	%
1	31,597	21.9	65,704	17.5	3,591	14.8	100,892	18.5
2	27,462	19.0	124,818	33.2	6,152	25.4	158,432	29.1
3	5,967	4.1	17,037	4.5	29	.1	23,033	4.2
4	33,409	23.1	46,033	12.2	3,638	15.0	83,080	15.2
5	38,860	26.9	92,703	24.6	9,027	37.2	140,590	25.8
6	1,416	1.0	11,820	3.2	210	.9	13,446	2.5
7	1,704	1.2	1,141	.3	184	.8	3,029	.6
8	3,709	2.6	9,821	2.6	1,322	5.5	14,852	2.7
9	230	.2	7,153	1.9	84	.3	7,467	1.4
TOTAL	144,354	100.0	376,230	100.0	24,237	100.0	544,821	100.0
CUMULATIVE TOTAL	26.5%		69.1%		4.4%		100.0%	

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To develop the most accurate data possible, the data collection effort was divided into 24 separate data collection segments spread over the 12-month period from May 16, 2002 to May 8, 2003. Using this format, a total of approximately 534 interviews were conducted each month (236 Arizona, 238 California, 60 Nevada) with one-half being conducted between roughly the 1st and 5th of the month and one-half between roughly the 16th and 20th of the month. During each of the 24 interviewing segments, boaters were asked to recall their boating patterns for only the two weeks prior to the interview.

At the beginning of this process, an analysis was made of the gasoline consumption variances that existed within each of the nine size/propulsion categories from the 2000 Arizona Watercraft Survey to determine the best method to stratify the current sample of boat owners to optimize sampling accuracy and efficiency. This analysis revealed that certain categories are very homogeneous and thus render relatively small standard deviations, while other classes are very heterogeneous and thus render relatively large standard deviations. This situation called for the use of a disproportional stratified sample in this segment of the study.

| <u>CLASS</u> | <u>LENGTH</u> | <u>PROPULSION</u>             |
|--------------|---------------|-------------------------------|
| 1            | Under 16'     | Outboard (prop)               |
| 2            | Under 16'     | Inboard & In/Out (prop & jet) |
| 3            | Under 16'     | Other (sail, oar, electric)   |
| 4            | 16' to 25'    | Outboard (prop)               |
| 5            | 16' to 25'    | Inboard & In/Out (prop & jet) |
| 6            | 16' to 25'    | Other (sail, oar, electric)   |
| 7            | Over 25'      | Outboard (prop)               |
| 8            | Over 25'      | Inboard & In/Out (prop & jet) |
| 9            | Over 25'      | Other (sail, oar, electric)   |
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In disproportional stratified sampling, disproportionate sampling fractions are used to manipulate the number of cases selected from each strata (in this case, the nine size/propulsion classes), with the strata's standard deviations being used as the basis for allocation of cases. Those classes with proportionately larger standard deviations receive a proportionately larger number of cases; while those with proportionately smaller standard deviations receive a proportionately smaller number of cases. In essence, this sampling method allows us to select fewer cases from homogeneous classes and more cases from heterogeneous classes, thereby increasing overall sampling efficiency and accuracy. As a result, the final gasoline consumption estimates are sensitive to variations in consumption within the size/propulsion classes, thereby increasing the accuracy of the final estimate. In addition, this methodology meets the contract required minimum of a margin of error of less than five percent at a 95 percent confidence level.

TABLE 2: TOTAL SAMPLING DISTRIBUTION

| <u>2000 WATERCRAFT SURVEY</u> |            |                                  |                                          |                       |                            |                                        |                                             |                                              |                                             |
|-------------------------------|------------|----------------------------------|------------------------------------------|-----------------------|----------------------------|----------------------------------------|---------------------------------------------|----------------------------------------------|---------------------------------------------|
| BOAT<br>CLASS                 | LENGTH     | PROPULSION                       | AVG. (MEAN)<br>DAILY FUEL<br>CONSUMPTION | STANDARD<br>DEVIATION | % OF 2002<br>REGISTRATIONS | PROPORTIONAL<br>SAMPLE<br>DISTRIBUTION | +/- MARGIN OF<br>ERROR AT 95%<br>CONFIDENCE | DISPRO-<br>PORTIONAL<br>STRATIFIED<br>SAMPLE | +/- MARGIN OF<br>ERROR AT 95%<br>CONFIDENCE |
| 1                             | Under 16'  | Outboard (prop<br>& jet)         | 10.9                                     | 17.8                  | 18.7%                      | 1,212                                  | 2.9                                         | 1,080                                        | 3.0                                         |
| 2                             | Under 16'  | Inboard & In/Out<br>(prop & jet) | 12.9                                     | 10.6                  | 28.1                       | 1,821                                  | 2.3                                         | 1,560                                        | 2.5                                         |
| 3                             | Under 16'  | Other (sail, oar,<br>electric)   | 10.5                                     | 12.7                  | 4.1                        | 266                                    | 6.1                                         | 290                                          | 5.9                                         |
| 4                             | 16' to 25' | Outboard (prop<br>& jet)         | 11.2                                     | 12.6                  | 15.3                       | 991                                    | 3.2                                         | 1,080                                        | 3.0                                         |
| 5                             | 16' to 25' | Inboard & In/Out<br>(prop & jet) | 16.3                                     | 23.9                  | 26.7                       | 1,730                                  | 2.4                                         | 1,630                                        | 2.5                                         |
| 6                             | 16' to 25' | Other (sail, oar,<br>electric)   | 4.2                                      | 3.7                   | 2.5                        | 162                                    | 7.9                                         | 200                                          | 7.1                                         |
| 7                             | Over 25'   | Outboard (prop<br>& jet)         | 20.8                                     | 24.2                  | 0.6                        | 39                                     | 16.0                                        | 100                                          | 10.0                                        |
| 8                             | Over 25'   | Inboard & In/Out<br>(prop & jet) | 21.2                                     | 18.7                  | 2.7                        | 175                                    | 7.6                                         | 250                                          | 6.3                                         |
| 9                             | Over 25'   | Other (Sail, oar,<br>electric)   | 3.8                                      | 0.0                   | 1.3                        | 84                                     | 10.9                                        | 150                                          | 8.1                                         |
| TOTAL                         |            |                                  | 13.4                                     | 16.5                  | 100.0%                     | 6,480                                  | 1.2                                         | 6,340                                        | 1.2                                         |

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To properly address this study's informational needs, the total interview sampling base was distributed among Arizona, California and Nevada watercraft owners in the following fashion. This distribution is similar to the 2000 study, in that it does not exactly reflect the Boat Use Days distribution derived from the prior Watercraft Survey. This distribution was used because it allows for more sensitive county use data (since few Californians use any Arizona lakes except those adjacent to the Colorado River) without harming the ability to estimate the required fuel consumption data. Further, the initial Nevada sample of 700 represents a sizeable increase from 351 conducted in 2000 and was expanded to allow for a better reading on Nevada boater use of Arizona lakes, which jumped from 246,000 boat use days in 1997 to 890,000 in 2000.

TABLE 3: SAMPLE DISTRIBUTION – BY STATE

<u>STATE</u>	<u>BOAT USE DAYS 2000</u>	<u>SAMPLE PERCENT</u>	<u>SAMPLE NUMBER</u>
Arizona	44.1%	44.5%	2,820
California	37.5	44.5	2,820
Nevada	<u>18.4</u>	<u>11.0</u>	<u>700</u>
TOTAL	100.0%	100.0%	6,340

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On the following table is presented a review of the total number of interviews conducted by state and boat class. As Table 4 reveals, a total of 6,462 interviews were conducted during the course of this study – 2,873 Arizona, 2,861 California, 728 Nevada. This volume is higher than the 6,340 initially planned for because additional interviews were conducted during each of the 24 interviewing segments.

TABLE 4: NUMBER OF INTERVIEWS COMPLETED

| <u>Boat<br/>Class</u> | <u>STATE OF REGISTRATION</u> |                |                   |               |
|-----------------------|------------------------------|----------------|-------------------|---------------|
|                       | <u>Total</u>                 | <u>Arizona</u> | <u>California</u> | <u>Nevada</u> |
| 1                     | 1,073                        | 583            | 393               | 97            |
| 2                     | 1,588                        | 542            | 873               | 173           |
| 3                     | 289                          | 120            | 169               | 0             |
| 4                     | 1,094                        | 658            | 340               | 96            |
| 5                     | 1,649                        | 752            | 654               | 243           |
| 6                     | 217                          | 48             | 144               | 25            |
| 7                     | 94                           | 48             | 24                | 22            |
| 8                     | 268                          | 98             | 120               | 50            |
| 9                     | 190                          | 24             | 144               | 22            |
| TOTAL                 | 6,462                        | 2,873          | 2,861             | 728           |

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3.3 Boat Owner Survey -- Questionnaire Development

The survey questionnaire utilized on this project was developed by BRC in conjunction with the TAC (see Appendix B). The question areas were as follows:

Watercraft Use:

- ! Number of days watercraft used (prior 2 weeks, annually)
- ! Reasons for non-use
- ! Specific Arizona lakes and rivers visited (prior 2 weeks, prior 12 months)
- ! Number of boating trips made (prior 2 weeks)
- ! Presence of boat engine
- ! Horsepower of boat engine
- ! Types of fuel used
- ! Average daily fuel consumption
- ! Types of vendors from which fuel purchased
- ! Percent of fuel purchased in Arizona

Destination Information:

- ! Most frequently visited lakes or rivers
- ! Average dollar amount spent on typical boating trip

Recreational Use Data:

- ! Boating activities engaged in during the recreation day
- ! Number of people per boating party on a typical outing

Boater Opinion:

- ! Types of boating and water-based recreational facilities needed at lake or river most often visited
- ! Evaluation of water-based recreation facilities at lake or river most often visited
- ! Adequacy of boating law enforcement and the safety and education programs at lake or river most often visited
- ! Awareness of State Lake Improvement Fund (SLIF)
- ! SLIF program funding priorities
- ! General attitudes on selected boating issues

After approval of the preliminary draft questionnaire, it was pre-tested with a randomly selected cross-section of watercraft owners. The pre-test focused on the value and understandability of the questions, adequacy of response categories, questions for which probes were necessary and the like. Several minor changes were made following the pre-test and the final form received TAC approval.

This survey utilized a "split" sample methodology. Using this methodology, selected survey questions were designated core questions and asked of all survey respondents while other survey questions were asked of only one-third of the survey respondents. This methodology is commonly used when the volume of information desired is particularly extensive and the number of interviews to be conducted is of adequate size to justify splitting. Questions 1 through 17a were designated core questions for the purpose of this survey and asked of all

study respondents. The remaining questions were asked of approximately one-third of the study respondents.

3.4 Boat Owner Survey -- Data Collection

All of the interviewing on this project was conducted at BRC's Computer Assisted Telephone Interviewing (CATI) facility in Phoenix where each interviewer worked under the direct supervision of BRC supervisory personnel. All of the interviewers who worked on this project were professional interviewers of the Center. Each had prior experience with BRC and received a thorough briefing on the particulars of this study. During the briefing, the interviewers were trained on (a) the purpose of the study, (b) sampling procedures, (c) administration of the questionnaire, and; (d) other project related factors. In addition, each interviewer completed a set of practice interviews to assure that all procedures were understood and followed.

As noted earlier, telephone interviewing on this study was conducted during 24 two-week time segments starting in May 2002 and ending in May 2003. During each segment, interviewing was restricted to Tuesdays, Wednesdays and Thursdays in order to avoid those days (Friday through Monday) on which the target universe (boat owners) was most likely to be away from home using their watercraft. Further, during the interviewing segment of this study, up to four separate attempts, on different days and during different times of day, were made to contact each selected boat owner. Only after four unsuccessful attempts was a selected boat owner substituted in the sample. Using this methodology, the full sample was completed and partially completed were not accepted nor counted toward fulfillment of the total sample quotas.

One hundred percent of the completed interviews were edited and any containing errors were pulled and the errors corrected. In addition, 15 percent of each interviewer's work was randomly selected for validation to ensure its authenticity and correctness. No problems were encountered during this phase of interviewing quality control.

As the data collection segment of this study was being undertaken, completed and validated interviews were turned over to BRC's in-house coding department. The coding department edited, validated and coded the interviews. Each interview that received final coding department approval was then transferred to the BRC computer department where a series of validity and logic checks were run on the data to insure it was "clean."

The final step prior to running computer analysis of the survey data was to "weight" the data to reflect the actual distribution of watercraft found in the sample universe as revealed earlier in Table 1. This weighted data was only used in analyzing the attitudinal data collected in the survey, not in calculating the fuel consumption and boat use data.

3.5 Study Audits/Survey

The second major data collection component on this project consisted of conducting audits of: (1) concessionaires, commercial boat operators and excursion operators; (2) government agencies, and; (3) marinas.

Each of these groups were audited/surveyed to collect the following information:

- ! **Concessionaires, Commercial Boat Operators and Excursion Operators:** To determine the amount of non-marina, Arizona gasoline they purchased.
- ! **Government Agencies:** To determine the amount of non-marina, Arizona gasoline subject to tax they purchased.
- ! **Marinas:** To determine the amount of gasoline purchased from Arizona distributors they sold.

In order to conduct these audits/surveys, it was first necessary to generate lists of each subject group. This was accomplished: (a) by using the lists compiled in previous Watercraft Surveys; (b) by reviewing telephone and Internet directories from around the state; (c) by reviewing AGFD's watercraft registration data base; (d) through discussions with selected chambers of commerce; (e) by referrals from other operators, agencies and marinas, and; (f) through discussions with AGFD Regional Supervisors.

All those on the identified lists were mailed a self-administered questionnaire along with a postage-paid, return mail envelope. Respondents were given approximately two weeks to respond to the mailing before follow-up telephone contact was undertaken and continued until a response was achieved. The audit/survey forms utilized during this study component are included in Appendix B of this report.

TABLE 5: NUMBER OF AUDITS/SURVEYS COMPLETED

MARINAS

Total forms mailed	67
No fuel sold/No Arizona fuel sold	31
Sell Arizona gasoline	22
No longer in business	10
Did not respond after multiple attempts	4

CONCESSIONAIRES

Total forms mailed	250
No fuel used/No qualified fuel used	97
No longer in business	96
Arizona fuel used	46
Did not respond after multiple attempts	11

GOVERNMENT AGENCIES

Total forms mailed	107
No fuel used/No qualified fuel used	51
Qualified Arizona fuel used	45
Did not respond after multiple attempts	11

3.6 Launch Ramp Survey

The final major data collection component on this project consisted of conducting a launch ramp observation survey to determine the ratio of in-state to out-of-state boaters on selected Arizona lakes and rivers. The ten lakes and rivers selected for inclusion into this study phase were chosen by the TAC and included the inland and border waterways listed below. A total of six observations were conducted at each site during the peak launching hours from 6:00 a.m. and noon. The six observations were distributed so they covered the following time periods: 1) two weekday observations (one in the on-season, one in the off-season); 2) three weekend observations (two in the on-season, one in the off-season), and; 3) one holiday observation (Memorial Day, Fourth of July or Labor Day).

<u>LAKE/RIVER</u>	<u>LOCATIONS</u>
Bartlett	Public Ramp
Havasu	Lake Havasu Marina/ Sandy Point Marina
Martinez	Marina Ramp
Mead	Temple Bar
Mohave	Katherine's Landing/ Willow Beach
Parker Strip	Buckskin Mountain State Park
Pleasant	Marina/Public Ramps
Powell	Wahweap Marina
Roosevelt	Marina/Cholla Ramp
Saguaro	Public Ramps

Following completion of the boat owner surveys, the study audits/surveys, and the launch ramp surveys the data presented in the remainder of this report was compiled.

4.0 OVERALL USE OF ARIZONA LAKES AND RIVERS

Watercraft owners were asked to indicate whether or not they utilized their boats on Arizona lakes and rivers during the two weeks prior to being interviewed or at any time during the prior 12 months.

Looking first at use during the prior two weeks, we find that 8.0 percent of registered watercraft owners in Arizona, California and Nevada use their boats during any given two week period -- down from 8.9 percent in 2000. Among Arizona watercraft owners, usage reaches 14.1 percent, which is below the 16.9 percent recorded in 2000, the 15.2 percent recorded in 1997 and the 18.3 percent recorded in 1994.

The Arizona usage figure is above those for the other three states studied with 5.4 percent of California owners and 12.9 percent of Nevada owners indicating use in Arizona during any two-week period. The percentage of California owners using their boats in Arizona is down from 2000 (5.7%) as is the percentage among Nevada owners (16.0%).

As noted in the previous studies, while the California use figure may look minimal compared to Arizona's, this is not the case due to the sheer volume of boats registered in California. For example, the California two-week use figure translates into 20,316 California owners using Arizona lakes and rivers (5.4% of 376,230 total owners). The comparable number for Arizona is nearly identical at 20,354 (14.1% of 144,354).

Looking next at the 12-month figures, we find that 40.6 percent of all watercraft owners in the three state survey universe utilized their boat in Arizona during the prior year which is up from 37.8 percent in 2000. Among Arizona users, the figure reaches 61.4 percent compared to 32.3 percent among California owners and 46.4 percent among Nevada owners.

**TABLE 6: WATERCRAFT USE ON ARIZONA
LAKE AND RIVERS -- PAST 2 WEEKS/PAST 12 MONTHS**

"To start, was your boat used on Arizona lakes and rivers, including the Colorado River, during the (FIRST/LAST) two weeks of (MONTH)?"

"Did you use your boat on Arizona lakes and rivers including the Colorado River, any time during the past 12 months?"

	<u>USED PAST 2 WEEKS</u>				<u>USED PAST 12 MONTHS</u>			
	Total	Ari- zona	Cali- fornia	Nev- ada	Total	Ari- zona	Cali- fornia	Nev- ada
<u>TOTAL - 2003</u>	8.0%	14.1%	5.4%	12.9%	40.6%	61.4%	32.3%	46.4%
- 2000	8.9	16.9	5.7	16.0	37.8	61.9	29.6	49.1
- 1997	8.1	15.2	5.4	10.6	37.1	60.7	29.1	40.5
- 1994	8.6	18.3	5.5	8.9	37.7	70.3	26.8	40.1
<u>BOAT CLASS</u>								
1	4.6%	9.4%	2.0%	8.2%	22.2%	45.5%	10.7%	27.8%
2	11.3	15.1	10.3	14.5	56.6	68.8	54.1	54.3
3	3.0	10.0	.6	0	15.0	44.2	4.7	0
4	8.5	13.7	4.4	13.5	41.6	64.3	24.4	51.0
5	7.8	16.6	3.7	12.8	44.4	68.1	34.4	44.9
6	2.7	18.8	.7	8.0	12.7	56.2	6.9	44.0
7	19.7	27.1	8.3	22.7	49.4	68.7	20.8	50.0
8	8.6	21.4	2.5	18.0	35.7	72.4	19.2	56.0
9	.6	12.5	0	13.6	3.1	54.2	.7	59.1
<u>SUMMARIZED CLASSES</u>								
Under 16' (1-3)	8.2%	11.8%	6.9%	12.9%	40.9%	55.1%	36.2%	44.8%
16' to 25' (4-6)	7.8	15.3	8.2	13.1	41.3	66.1	29.2	46.4
26'+ (7-9)	7.3	20.9	3.6	15.8	27.9	70.1	12.1	57.9

TABLE NOTE: 2 week data based on 517 users (8.0% of 6,462), 12 month data based on 2,624 users (40.6% of 6,462).

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The main reasons Arizona watercraft owners give for not using their boats in the state is that they are either too busy (41%) or have lost interest (28%). The main reason among California and Nevada owners is that they only use their boats in their home state (California 44%, Nevada 30%).

**TABLE 7: MAIN REASONS FOR NOT USING BOAT  
WITHIN THE LAST 12 MONTHS**

"Was there any particular reason your boat wasn't used in Arizona?"

|                                                    | <u>STATE OF REGISTRATION</u> |                   |               |
|----------------------------------------------------|------------------------------|-------------------|---------------|
|                                                    | <u>Arizona</u>               | <u>California</u> | <u>Nevada</u> |
| Too busy, no time                                  | 41%                          | 19%               | 25%           |
| Loss of interest, prefer other forms of recreation | 28                           | 16                | 24            |
| Boat is inoperable, broken down                    | 18                           | 12                | 14            |
| Out-of-state resident, use only in other state     | 6                            | 44                | 30            |
| Low water levels                                   | 5                            | 1                 | 4             |
| Distance to Arizona lakes and rivers is too far    | 2                            | 12                | 9             |
| Too crowded                                        | 2                            | 1                 | 1             |
| The expense is too much                            | 2                            | 2                 | 1             |
| All other responses                                | 2                            | 1                 | 1             |

Totals exceed 100% due to multiple responses.

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On Table 8, data is presented on use days and trip frequency during the past two weeks and the past 12 months. The following patterns are revealed:

USAGE PAST 2 WEEKS

- ! **NUMBER OF USE DAYS** - Owners used their boats on Arizona lakes and rivers an average of 3.4 days in the past two weeks -- down slightly from 3.5 days in 2000. Arizona owners' use decreased from 3.5 days in 2000 to 3.0 days in 2003.
- ! **NUMBER OF TRIPS** - The typical owner that used their boat in the past two weeks made only one trip (57%) during the two-week period – virtually unchanged from 58 percent in 2000.

USAGE PAST 12 MONTHS

- ! **NUMBER OF USE DAYS** - Owners used their boats on Arizona lakes and rivers an average of 16.1 days in the past 12 months -- up slightly from 15.9 days in 2000. Arizona owners' use decreased from 19.7 days in 2000 to 17.8 days in 2003.
- ! **NUMBER OF TRIPS** – Fifty-three percent of owners who used their boats in Arizona during the past two weeks made 10 or more trips in the past 12 months – virtually unchanged from 52 percent in 2000.

TABLE 8: USE DAYS AND NUMBER OF TRIPS --
PAST 2 WEEKS/PAST 12 MONTHS
 (AMONG OWNERS USING BOATS IN ARIZONA)

	<u>TOTAL</u>				<u>STATE OF REGISTRATION - 2002</u>		
	<u>2003</u>	<u>2000</u>	<u>1997</u>	<u>1994</u>	<u>Arizona</u>	<u>California</u>	<u>Nevada</u>
Past 2 Weeks							
Number of Use Days							
1	20%	18%	19%	18%	29%	9%	29%
2	26	25	26	24	27	26	20
3	20	19	18	17	16	24	25
4	13	15	15	15	10	16	9
5 to 6	11	11	11	14	9	13	8
7 to 9	6	7	5	6	6	7	5
10 or more	<u>4</u>	<u>5</u>	<u>6</u>	<u>6</u>	<u>3</u>	<u>5</u>	<u>4</u>
	100%	100%	100%	100%	100%	100%	100%
MEAN - 2003	3.4	NA	NA	NA	3.0	3.8	3.2
- 2000	NA	3.5	NA	NA	3.5	3.7	2.6
- 1997	NA	NA	3.3	NA	3.1	3.6	2.9
- 1994	NA	NA	NA	3.8	3.8	3.8	3.5
Number of Trips							
1	57%	58%	63%	59%	51%	64%	49%
2	22	22	21	21	27	16	30
3 or more	<u>21</u>	<u>20</u>	<u>16</u>	<u>20</u>	<u>22</u>	<u>20</u>	<u>21</u>
	100%	100%	100%	100%	100%	100%	100%

(CONTINUED)

(CONT.) TABLE 8: USE DAYS AND NUMBER OF TRIPS --
PAST 2 WEEKS/PAST 12 MONTHS
 (AMONG OWNERS USING BOATS IN ARIZONA)

	<u>TOTAL</u>				<u>STATE OF REGISTRATION - 2002</u>		
	<u>2003</u>	<u>2000</u>	<u>1997</u>	<u>1994</u>	<u>Arizona</u>	<u>California</u>	<u>Nevada</u>
Past 12 Months							
Number of Use Days							
1 to 5	30%	31%	33%	27%	29%	31%	29%
6 to 10	27	27	24	22	24	30	20
11 to 15	15	13	15	16	15	14	17
16 to 24	10	10	11	12	11	9	11
25 to 49	13	13	12	16	14	12	15
50 or over	<u>5</u>	<u>6</u>	<u>5</u>	<u>7</u>	<u>7</u>	<u>4</u>	<u>8</u>
	100%	100%	100%	100%	100%	100%	100%
MEAN - 2003	16.1	NA	NA	NA	17.8	14.4	19.8
- 2000	NA	15.9	NA	NA	19.7	13.3	15.8
- 1997	NA	NA	15.7	NA	17.8	12.5	19.4
- 1994	NA	NA	NA	16.4	18.9	14.1	17.9
Number of Trips¹							
1 to 4	27%	28%	26%	27%	18%	38%	20%
5 to 9	20	20	19	22	17	24	8
10 to 14	16	15	17	16	16	15	13
15 to 24	14	15	19	13	18	9	24
25 to 49	14	13	10	15	19	9	19
50 or over	<u>9</u>	<u>9</u>	<u>9</u>	<u>7</u>	<u>12</u>	<u>5</u>	<u>16</u>
	100%	100%	100%	100%	100%	100%	100%

¹Only asked of those owners who also used their boat in past 2 weeks.

5.0 FUEL CONSUMPTION

In this section of the report we present an analysis of the percentage of total Arizona fuel consumed by watercraft within the state.

5.1 Boat Owner Survey

Looking first at general fuel consumption patterns, we present Table 9 which reveals the following findings:

- ! Gasoline is used to propel approximately 98 percent of all boats, with the remainder utilizing diesel and aviation fuel.
- ! 95 percent of Arizona boaters purchase Arizona fuel compared to 73 percent of California boaters and 22 percent of Nevada boaters. These figures represent a slight increase since the 2000 Survey among Arizona boaters (from 89.8% to 95.1%), and major decreases among California boaters (from 83.6% to 72.8%) and Nevada boaters (from 42.0% to 21.6%).
- ! 88 percent of Arizona boaters purchase their Arizona fuel at a non-marina location compared to 85 percent of California boaters and 69 percent of Nevada boaters. Marina purchasing reaches its highest level among Nevada boaters (31%).
- ! The typical Arizona boater who utilized their boat in the prior two weeks purchased 36.4 gallons of Arizona fuel, while the typical California boater purchased 36.7 gallons and the typical Nevada boater 15.2 gallons. These figures represent sizeable decreases of 4.5 gallons among Arizona boaters and 5.4 gallons among California boaters since 2000. Nevada boaters reveal a decrease of only .7 gallons over the same period.

TABLE 9: FUEL CONSUMPTION PATTERNS AMONG
BOATERS UTILIZING WATERCRAFT IN ARIZONA DURING
PRECEDING 2-WEEK PERIOD

	<u>STATE OF REGISTRATION – 2002</u>		
	<u>Arizona</u>	<u>California</u>	<u>Nevada</u>
Type of fuel used			
Gasoline	98.2%	97.8%	98.7%
Other	<u>1.8</u> 100.0%	<u>1.8</u> 100.0%	<u>1.8</u> 100.0%
Percent of fuel purchased in Arizona			
2003	95.1	72.8	21.6
2000	89.8	83.6	42.0
1997	93.9	65.7	12.2
1994	98.4	67.8	29.7
Location Arizona fuel purchased			
Non-Marina	88.5%	85.2%	69.2%
Marina	<u>11.5</u> 100.0%	<u>14.8</u> 100.0%	<u>30.8</u> 100.0%
Arizona purchased gallons used preceding 2-week period -- Mean			
2003	36.4	36.7	15.2
2000	40.9	42.1	15.9
1997	30.7	32.3	4.7
1994	37.9	33.3	11.1
Non-marina, Arizona purchased gallons used preceding 2-week period -- Mean			
2003	32.2	31.2	10.5
2000	36.0	36.2	11.6
1997	26.4	26.5	1.1
1994	32.2	22.2	3.0
Marina, Arizona purchased gallons used preceding 2-week period – Mean			
2003	4.2	5.5	4.7
2000	4.9	5.9	4.3
1997	4.3	5.8	3.6
1994	5.7	11.1	8.1

Tables 9 through 16 present the gasoline consumption figures based on the results of the boat owner survey. These tables present fuel consumption for each state surveyed and for the total study universe.

Below is the formula used to develop the consumption figures presented in the tables. This formula is based on the following factors:

- A - Average number of days individual boat was used during two-week period.
- B - Average number of gallons of gasoline used per day by individual boat.
- C - Average number of gallons of gasoline used during two-week period by individual boat.
- D - Percent of gasoline purchased from Arizona suppliers by individual boat.
- E - Average number of gallons of Arizona gasoline purchased during two-week period by individual boat.
- F - Percent of gasoline purchased from non-marina sources by individual boat.
- G - Average number of gallons of non-marina, Arizona gasoline purchased during two-week period.
- H - Number of boats in class using Arizona lakes and rivers during two-week period.
- I - Total gallons of non-marina, Arizona gasoline purchased during two-week period by boat class.
- J - Total number of study periods - 24.
- K - Total gallons of non-marina, Arizona gasoline purchased by boat owners over 12-month period.

GASOLINE CONSUMPTION FORMULA

1st:	$A \times B = C$
2nd:	$C \times D = E$
3rd:	$E \times F = G$
4th:	$G \times H = I$
5th:	$I \times J = K$

The following main findings from the boat owner survey are revealed in the fuel consumption summaries presented on Tables 10 and 11:

- ! A total of 30,176,496 gallons of non-marina Arizona gasoline was purchased to propel boats during the study period. **This figure represents a 25.2 percent decrease over the 40,324,440 gallons recorded during the 2000 study (excluding 2000 Utah gallons).** There are three primary reasons for this significant decrease in non-marina gasoline purchasing by boaters:
 - 1) First, the percent of boaters who used their watercraft on Arizona lakes and rivers in the prior two weeks decreased sharply from 8.9 percent in 2000 to 8.0 percent in 2003.
 - 2) Second, the average number of days boaters used their watercraft on Arizona lakes and rivers in the prior two weeks decreased from 3.5 days in 2000 to 3.4 days in 2003.
 - 3) Third, consumption of Arizona fuel by California and Nevada boaters decreased between 2000 and 2003 (83.6% of California boaters purchased Arizona fuel in 2000 compared to only 72.8% in 2003; 42.0% of Nevada boaters purchased Arizona fuel in 2000 compared to only 21.6% in 2003).

Perhaps the best explanations for these declines are the United States' economy woes and Arizona's continuing drought.

- ! Arizona fuel consumption decreased in 2003 over 2000 within each of the three states participating in both surveys:
 - Arizona consumption decreased 33.4 percent – from 21,990,456 to 14,635,512.
 - California consumption decreased 13.2 percent – from 17,051,856 to 14,807,160.
 - Nevada consumption decreased 42.7 percent – from 1,282,128 to 733,824.
- ! The boating classification which continues to account for the largest amount of non-marina consumption is Class 2 with a reading of 47.3 percent (up from 41.5% in 2000) which is made up predominantly of jet skis. Among California boaters this class accounts for 67.7 percent of consumption (up from 64.4% in 2000).
- ! The total number of gallons of Arizona gasoline, both marina and non-marina, purchased during the study period is 35,859,216 gallons -- down sharply from 46,237,656 gallons in 2000 (excluding Utah gallons).

TABLE 10: WATERCRAFT FUEL CONSUMPTION OF
ARIZONA, NON-MARINA GASOLINE (BOAT OWNER SURVEY)

BOAT CLASS	TOTAL	ARIZONA	CALIFORNIA	NEVADA
1	1,921,728	1,045,680	795,336	80,712
2	14,285,880	4,093,584	10,027,680	164,616
3	199,416	150,456	48,960	0
4	3,892,920	2,597,904	1,172,232	122,784
5	7,375,920	4,652,472	2,613,672	109,776
6	146,232	110,376	35,856	0
7	300,312	245,592	42,744	11,976
8	2,044,344	1,729,704	70,680	243,960
9	9,744	9,744	0	0
TOTAL 2003	30,176,496	14,635,512	14,807,160	733,824
TOTAL 2000*	41,987,664	21,990,456	17,051,856	1,282,128
TOTAL 1997	25,670,850	13,126,698	12,432,840	111,312
TOTAL 1994	28,869,425	17,686,039	11,025,526	157,860

*2000 TOTAL INCLUDES 1,663,224 UTAH GALLONS

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TABLE 11: WATERCRAFT FUEL CONSUMPTION  
OF ARIZONA GASOLINE -- ANY SOURCE (BOAT OWNER SURVEY)

| BOAT<br>CLASS | TOTAL      | NON-<br>MARINA | MARINA    |
|---------------|------------|----------------|-----------|
| 1             | 2,022,408  | 1,921,728      | 100,680   |
| 2             | 16,705,224 | 14,285,880     | 2,419,344 |
| 3             | 199,416    | 199,416        | 0         |
| 4             | 4,571,784  | 3,892,920      | 678,864   |
| 5             | 8,364,960  | 7,375,920      | 989,040   |
| 6             | 161,112    | 146,232        | 14,880    |
| 7             | 402,816    | 300,312        | 102,504   |
| 8             | 3,402,240  | 2,044,344      | 1,357,896 |
| 9             | 29,256     | 9,744          | 19,512    |
| TOTAL 2003    | 35,859,216 | 30,176,496     | 5,682,720 |
| TOTAL 2000*   | 48,312,576 | 41,987,664     | 6,324,912 |
| TOTAL 1997    | 30,974,826 | 25,670,850     | 5,303,976 |
| TOTAL 1994    | 36,699,246 | 28,869,425     | 7,829,821 |

\*2000 TOTAL INCLUDES 2,074,920 UTAH GALLONS

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TABLE 12: ARIZONA GASOLINE CONSUMPTION — NON-MARINA GALLONS — AZ BOATS

	(1)	(2)	(3)	(4)	(5)	(6)
Boat Class	AZ Gallons Purchased Past 2 Weeks	Total AZ Registered Boats	% AZ Boats Used Past 2 Weeks	Number Of AZ Boats Used Past 2 Weeks (2x3)	Total AZ Gallons Past 2 Weeks (1x4)	Total AZ Gallons Past 12 Months (5x24)
1	14.67	31,597	9.4	2,970	43,570	1,045,680
2	41.13	27,462	15.1	4,147	170,566	4,093,584
3	10.50	5,967	10.0	597	6,269	150,456
4	23.65	33,409	13.7	4,577	108,246	2,597,904
5	30.05	38,860	16.6	6,451	193,853	4,652,472
6	17.29	1,416	18.8	266	4,599	110,376
7	22.15	1,704	27.1	462	10,233	245,592
8	90.77	3,709	21.4	794	72,071	1,729,704
9	14.01	230	12.5	29	406	9,744
TOTAL						14,635,512

TABLE 13: ARIZONA GASOLINE CONSUMPTION — MARINA GALLONS — AZ BOATS

	(1)	(2)	(3)	(4)	(5)	(6)
Boat Class	AZ Gallons Purchased Past 2 Weeks	Total AZ Registered Boats	% AZ Boats Used Past 2 Weeks	Number Of AZ Boats Used Past 2 Weeks (2x3)	Total AZ Gallons Past 2 Weeks (1x4)	Total AZ Gallons Past 12 Months (5x24)
1	.28	31,597	9.4	2,970	832	19,968
2	6.11	27,462	15.1	4,147	25,338	608,112
3	0	5,967	10.0	597	0	0
4	2.30	33,409	13.7	4,577	10,527	252,648
5	3.14	38,860	16.6	6,451	20,256	486,144
6	2.33	1,416	18.8	266	620	14,880
7	5.39	1,704	27.1	462	2,490	59,760
8	66.03	3,709	21.4	794	52,428	1,258,272
9	28.02	230	12.5	29	813	19,512
TOTAL						2,719,296

TABLE 14: ARIZONA GASOLINE CONSUMPTION — NON-MARINA GALLONS — CA BOATS

	(1)	(2)	(3)	(4)	(5)	(6)
Boat Class	AZ Gallons Purchased Past 2 Weeks	Total CA Registered Boats	% CA Boats Used Past 2 Weeks	Number Of CA Boats Used Past 2 Weeks (2x3)	Total AZ Gallons Past 2 Weeks (1x4)	Total AZ Gallons Past 12 Months (5x24)
1	25.22	65,704	2.0	1,314	33,139	795,336
2	32.50	124,818	10.3	12,856	417,820	10,027,680
3	20.00	17,037	.6	102	2,040	48,960
4	24.12	46,033	4.4	2,025	48,843	1,172,232
5	31.75	92,703	3.7	3,430	108,903	2,613,672
6	18.00	11,820	.7	83	1,494	35,856
7	18.75	1,141	8.3	95	1,781	42,744
8	11.97	9,821	2.5	246	2,945	70,680
9	0	7,153	0	0	0	0
TOTAL						14,807,160

TABLE 15: ARIZONA GASOLINE CONSUMPTION — MARINA GALLONS — CA BOATS

	(1)	(2)	(3)	(4)	(5)	(6)
Boat Class	AZ Gallons Purchased Past 2 Weeks	Total CA Registered Boats	% CA Boats Used Past 2 Weeks	Number Of CA Boats Used Past 2 Weeks (2x3)	Total AZ Gallons Past 2 Weeks (1x4)	Total AZ Gallons Past 12 Months (5x24)
1	0	65,704	2.0	1,314	0	0
2	5.66	124,818	10.3	12,856	72,765	1,746,360
3	0	17,037	.6	102	0	0
4	8.77	46,033	4.4	2,025	17,759	426,216
5	4.88	92,703	3.7	3,430	16,738	401,712
6	0	11,820	.7	83	0	0
7	18.75	1,141	8.3	95	1,781	42,744
8	0	9,821	2.5	246	0	0
9	0	7,153	0	0	0	0
TOTAL						2,617,032

TABLE 16: ARIZONA GASOLINE CONSUMPTION — NON-MARINA GALLONS — NV BOATS

	(1)	(2)	(3)	(4)	(5)	(6)
Boat Class	AZ Gallons Purchased Past 2 Weeks	Total NV Registered Boats	% NV Boats Used Past 2 Weeks	Number Of NV Boats Used Past 2 Weeks (2x3)	Total AZ Gallons Past 2 Weeks (1x4)	Total AZ Gallons Past 12 Months (5x24)
1	11.44	3,591	8.2	294	3,363	z
2	7.69	6,152	14.5	892	6,859	164,616
3	0	29	0	0	0	0
4	10.42	3,638	13.5	491	5,116	122,784
5	3.96	9,027	12.8	1,155	4,574	109,776
6	0	210	8.0	17	0	0
7	11.88	184	22.7	42	499	11,976
8	42.71	1,322	18.0	238	10,165	243,960
9	0	84	13.6	11	0	0
TOTAL						733,824

TABLE 17: ARIZONA GASOLINE CONSUMPTION — MARINA GALLONS — NV BOATS

	(1)	(2)	(3)	(4)	(5)	(6)
Boat Class	AZ Gallons Purchased Past 2 Weeks	Total NV Registered Boats	% NV Boats Used Past 2 Weeks	Number Of NV Boats Used Past 2 Weeks (2x3)	Total AZ Gallons Past 2 Weeks (1x4)	Total AZ Gallons Past 12 Months (5x24)
1	11.44	3,591	8.2	294	3,363	80,712
2	3.03	6,152	14.5	892	2,703	64,872
3	0	29	0	0	0	0
4	0	3,638	13.5	491	0	0
5	3.65	9,027	12.8	1,155	4,216	101,184
6	0	210	8.0	17	0	0
7	0	184	22.7	42	0	0
8	17.44	1,322	18.0	238	4,151	99,624
9	0	84	13.6	11	0	0
TOTAL						346,392

5.2 Study Audits/Survey

! Concessionaires, Commercial Boat Operators and Excursion Operators

Total consumption of non-marina, Arizona gasoline among the operators surveyed is 365,924 gallons, up slightly from 333,586 in 2000.

! Government Agencies

Total consumption of non-marina, Arizona gasoline subject to tax among the agencies surveyed is 37,930 gallons, down slightly from 38,616 in 2000.

! Marinas

Total sales of Arizona gasoline among the marinas surveyed is 4,877,597, down sharply from 6,360,809 in 2000.

5.3 Total Annual Gasoline Consumption Calculations

Presented in Table 18 is the summarized data on gasoline consumption from each of the various study components.

In 1991 ADOT, AGFD and ASPB signed an agreement (see Appendix) that established a protocol on how the SLIF allocation percentage was to be calculated in the later surveys. The specifics of this protocol are as follows:

Variables (In gallons)

- A = Boaters' reports of marina fuel purchases
- B = Marinas' reports of fuel sales
- C = Boaters' reports of non-marina fuel purchases
- D = Commercial and government reports of watercraft fuel purchases
- E = Total statewide gasoline sales on which Arizona tax was paid

Step 1: Compare Variables A and B.

- ! If A divided by B is 1.25 or less, use Method #1.
- ! If A divided by B is more than 1.25, use Method #2.

Step 2: Calculate SLIF Percentage.

Method #1:

$$(A + C + D) \div E = \text{SLIF Percentage}$$

Method #2:

$$([B + D + (C \times B/A)] \div E) \times 1.25 = \text{SLIF Percentage}$$

As required by the protocol, the first step in calculating the SLIF allocation percentage is to compare the fuel estimates from the boater survey and the marina audits/surveys. This step indicates that the variation is 1.17.

<u>MARINA FUEL SALES ESTIMATES</u>				
	<u>2002- 2003</u>	<u>1999- 2000</u>	<u>1996- 1997</u>	<u>1993- 1994</u>
A. Marina Purchasing Estimate From Boat Owner Survey	5,682,720	6,324,912	5,303,976	7,829,821
B. Marina Fuel Sales Estimate From Marina Audit	4,877,597	6,360,809	6,365,266	6,347,337
Variation (A/B)	1.17	.99	.83	1.23

~~~~~

According to the protocol, the 1.17 variation calls for the use of method 1 for calculating the SLIF allocation. **Applying this formula to the collected data, we estimate the 2003 SLIF allocation at 1.4514 percent.**

|                                                                                                                                                                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><u>SLIF Using Method 1: <math>(A+C+D) \div E = \text{SLIF}</math></u><br/><math>(5,682,720 + 32,268,944 + 403,854) \div 2,642,538,772</math><br/><b>1.4514</b></p> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|

TABLE 18: ANNUAL WATERCRAFT FUEL CONSUMPTION SUMMARY TOTALS

|                                                                                                                                        | GALLONS       |               |               |               |
|----------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------|---------------|---------------|
|                                                                                                                                        | 2003          | 2000          | 1997          | 1994          |
| Registered Boat Owner's Consumption Of Non-Marina, Arizona Gasoline                                                                    |               |               |               |               |
| Arizona registered                                                                                                                     | 14,635,512    | 21,990,456    | 13,126,698    | 17,686,039    |
| California registered                                                                                                                  | 14,807,160    | 17,051,856    | 12,432,840    | 11,025,526    |
| Utah registered (2000 consumption figure reduced by 25.2%, the 2000 to 2003 reduction recorded in Arizona, California and Nevada)      | 1,244,092     | 1,663,224     | NA            | NA            |
| Nevada registered                                                                                                                      | 733,824       | 1,282,128     | 111,312       | 157,860       |
| Total From Survey                                                                                                                      | 31,420,588    | 41,987,664    | 25,670,850    | 28,869,425    |
| Plus Adjustment For Non-Surveyed Boaters (Other Out-of-State) Consumption – 2.7                                                        | 848,356       | 1,333,667     | 1,386,226     | 1,558,949     |
| Total (C)                                                                                                                              | 32,268,944    | 43,121,331    | 27,057,076    | 30,428,374    |
| Commercial Operators (Concessionaires, Commercial Boat Operators, Excursion Operators) Consumption of Non-Marina, Arizona Gasoline (D) | 365,924       | 333,586       | 293,764       | 318,978       |
| Public Agencies Consumption of Taxable Non-Marina, Arizona Gasoline (D)                                                                | 37,930        | 38,616        | 36,206        | 14,318        |
| Marina Fuel Sales – Total From Boat Owner Survey (A)                                                                                   | 5,682,720     | 6,324,912     | 5,303,976     | 7,829,821     |
| Marina Fuel Sales – From Marina Audits/Surveys (B)                                                                                     | 4,877,597     | 6,360,809     | 6,365,266     | 6,347,337     |
| Total Gallons Of Taxable Gasoline Sold In Arizona Between May 1, 2002 and April 3, 2003 (E)                                            | 2,642,538,772 | 2,450,738,376 | 2,128,421,772 | 1,930,696,021 |

( ) Indicates data items used in formula

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6.0 RECREATIONAL WATERCRAFT USE BY COUNTY

In this section of the report we present data on watercraft usage in each Arizona county by Arizona, California, and Nevada boat owners. Watercraft usage in this section is calculated and presented using two different data sets. The first data set is based on lake utilization during the two weeks prior to being interviewed and is identical to the format followed in the 1994 and 1997 Watercraft Surveys. The second data set is based on lake utilization during the 12 months prior to being interviewed and excludes any boater who utilized their boats in the two weeks prior to being interviewed. This data set was first included in the 2000 Watercraft Survey at the request of the Arizona State Parks Board in order to get a broader representation of lake/river use in Arizona. This process again proved successful in that 57 lakes/ivers are represented when the data is calculated using the 12 month data set compared to only 36 when the two week data set is used.

6.1 Two Week Data Set

The total number of days of use for each lake by boat class was obtained by summing days of use for all respondents in the sample for each class at each lake. In order to assure that each boat class was proportionately represented in the final calculation of boat usage at each lake, the total number of boats in a class were divided by the total number of respondents in each class. As a result of this division, a survey sample factor was generated for each class.

$$\begin{aligned}
 \text{Sample Factor} &= \frac{\text{Boats in Class 1}}{\text{Survey Respondents in Class 1}} \\
 &= \frac{31,597}{583} \\
 &= 54.20
 \end{aligned}$$

Days of usage at each lake or river from each boat class were then multiplied by the respective class sample factor and number of study segments (24) to obtain the total usage days for the lake or river for the respective class. By aggregating the calculated usage days over all classes, the total boat usage for each lake was determined.

Sample Use Days by Boat Class at Each Lake	X	Sample Factor	X	Study Segments	=	Boat Use Days at Each Lake
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Person use days for each lake were then calculated by multiplying the boat use days at each lake by the average boating party size for that lake.

Boat Use Days at Each Lake	X	Mean Party Size at Each Lake	=	Person Use Days at Each Lake
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TABLE 19: SURVEY SAMPLE FACTOR

BOAT CLASS	TOTAL BOATS IN CLASS	RESPONDENTS IN CLASS	SAMPLE FACTOR
ARIZONA			
1	31,597	583	54.20
2	27,462	542	50.67
3	5,967	120	49.73
4	33,409	658	50.77
5	38,860	752	51.68
6	1,416	48	29.50
7	1,704	48	35.50
8	3,709	98	37.85
9	230	24	9.58
CALIFORNIA			
1	65,704	393	167.19
2	124,818	873	142.98
3	17,037	169	100.81
4	46,033	340	135.39
5	92,703	654	141.75
6	11,820	144	82.08
7	1,141	24	47.54
8	9,821	120	81.84
9	7,153	144	49.67
NEVADA			
1	3,591	97	37.02
2	6,152	173	35.56
3	29	0	0
4	3,638	96	37.90
5	9,027	243	37.15
6	210	25	8.40
7	184	22	8.36
8	1,322	50	26.44
9	84	22	3.82

~~~~~

The next two tables provide summaries of boat use days (Table 20) and person use days (Table 21). Looking first at boat use days, we find that total boat use days in 2003 were 3,229,153, a 35 percent decrease from the 4,958,757 boat use days recorded in 2000. Similar to the prior three studies, Mohave County is the dominant boating location in Arizona with 40.8 percent of total boat use days – a figure which is down from the 50 percent recorded in 2000. Also note the 64 percent decrease in boat use days in Coconino County – 320,626 in 2003 vs. 885,744 in 2000 – and 27 percent decline in boat use days in La Paz County – 442,153 in 2003 vs. 608,650 in 2000. The primary reasons behind the decrease in Coconino County are the exclusion of Utah boaters in this study and decreased use of Lake Powell by boaters from each of the included states (likely due to low water level). The primary reason for the decline in La Paz County is much lower use of the county's waterways by California boaters.

The data also reveals a 27 percent increase in boat use days in Maricopa County and a 116 percent increase in boat use days in Yuma County. The Maricopa increase is due to increased Arizona boater use while the Yuma increase is due to increased California boater use.

TABLE 20: BOAT USE DAYS BY COUNTY –  
OVERALL SUMMARY (2 WEEK DATA)

|            | <u>2003</u>  |          | <u>2000</u>  |          | <u>1997</u>  |          | <u>1994</u>  |          |
|------------|--------------|----------|--------------|----------|--------------|----------|--------------|----------|
|            | <u>Total</u> | <u>%</u> | <u>Total</u> | <u>%</u> | <u>Total</u> | <u>%</u> | <u>Total</u> | <u>%</u> |
| Mohave     | 1,318,838    | 40.8%    | 2,480,072    | 50.0%    | 2,318,038    | 51.5%    | 1,869,311    | 44.4%    |
| Maricopa   | 650,668      | 20.2     | 510,469      | 10.3     | 435,409      | 9.7      | 721,393      | 17.1     |
| La Paz     | 442,153      | 13.7     | 608,650      | 12.3     | 530,639      | 11.8     | 349,129      | 8.3      |
| Coconino   | 320,626      | 9.9      | 885,744      | 17.9     | 480,511      | 10.7     | 471,667      | 11.2     |
| Yuma       | 216,476      | 6.7      | 100,090      | 2.0      | 386,890      | 8.6      | 233,006      | 5.5      |
| Gila       | 161,640      | 5.0      | 161,464      | 3.3      | 199,661      | 4.4      | 337,758      | 8.0      |
| Santa Cruz | 48,881       | 1.5      | 29,596       | .6       | 9,214        | .2       | 36,116       | .9       |
| Apache     | 35,348       | 1.1      | 84,744       | 1.7      | 41,070       | .9       | 57,202       | 1.4      |
| Cochise    | 22,998       | .7       | 31,072       | .6       | 24,406       | .5       | 32,654       | .8       |
| Navajo     | 5,203        | .2       | 16,574       | .3       | 20,298       | .4       | 20,039       | .5       |
| Yavapai    | 3,721        | .1       | 4,906        | .1       | 4,828        | .1       | 6,033        | .1       |
| Graham     | 2,602        | .1       | 16,422       | .3       | 25,583       | .6       | 35,029       | .8       |
| Pinal      | 0            | 0        | 22,980       | .5       | 26,309       | .6       | 31,391       | .7       |
| Pima       | 0            | 0        | 5,974        | .1       | 0            | 0        | 11,316       | .3       |
| Greenlee   | <u>0</u>     | <u>0</u> | <u>0</u>     | <u>0</u> | <u>0</u>     | <u>0</u> | <u>0</u>     | <u>0</u> |
| TOTAL      | 3,229,153    | 100.0%   | 4,958,757    | 100.0%   | 4,502,856    | 100.0%   | 4,212,044    | 100.0%   |

NOTE: 2003 data differs from the prior studies in the following ways: 1) all use on Alamo Lake attributed to La Paz County, not divided equally between La Paz and Mohave; 2) all use on San Carlos Lake attributed to Gila County, not divided equally between Gila, Graham and Pinal; 3) 10% of Lake Havasu use attributed to La Paz County, not all to Mohave; 4) new category Ehrenberg to north end of Martinez Lake attributed to La Paz County.

Looking next at person use days, Table 21 reveals that person use days decreased from 22,885,059 in 2000 to 14,781,894 in 2003 – a 35 percent drop. As in the case with boat use days, Mohave County is the dominant boating location in Arizona accounting for 43.5 percent of all person use days followed by Maricopa County with 16.8 percent.

TABLE 21: PERSON USE DAYS BY COUNTY –  
OVERALL SUMMARY (2 WEEK DATA)

|            | <u>2003</u>  |          | <u>2000</u>  |          | <u>1997</u>  |          | <u>1994</u>  |          |
|------------|--------------|----------|--------------|----------|--------------|----------|--------------|----------|
|            | <u>Total</u> | <u>%</u> | <u>Total</u> | <u>%</u> | <u>Total</u> | <u>%</u> | <u>Total</u> | <u>%</u> |
| Mohave     | 6,437,111    | 43.5%    | 11,385,613   | 49.8%    | 11,921,890   | 52.9%    | 8,507,177    | 47.6%    |
| Maricopa   | 2,478,485    | 16.8     | 2,044,948    | 8.9      | 1,739,878    | 7.7      | 2,598,861    | 14.5     |
| La Paz     | 2,238,893    | 15.1     | 2,799,389    | 12.2     | 3,246,413    | 14.4     | 1,665,431    | 9.3      |
| Coconino   | 1,511,979    | 10.2     | 4,761,240    | 20.8     | 2,636,853    | 11.7     | 2,086,267    | 11.7     |
| Yuma       | 1,067,745    | 7.2      | 422,297      | 1.9      | 1,390,959    | 6.1      | 1,119,365    | 6.3      |
| Gila       | 674,120      | 4.6      | 742,721      | 3.3      | 1,108,917    | 4.9      | 1,258,568    | 7.0      |
| Santa Cruz | 179,535      | 1.2      | 56,358       | .2       | 18,429       | .1       | 80,178       | .4       |
| Apache     | 111,920      | .8       | 300,313      | 1.3      | 131,801      | .6       | 146,928      | .8       |
| Cochise    | 54,103       | .4       | 107,241      | .5       | 107,387      | .5       | 130,616      | .7       |
| Navajo     | 19,078       | .1       | 46,624       | .2       | 64,574       | .3       | 47,692       | .3       |
| Graham     | 5,203        | *        | 56,890       | .3       | 82,435       | .4       | 109,634      | .6       |
| Yavapai    | 3,721        | *        | 67,526       | .3       | 12,875       | *        | 14,883       | .1       |
| Pinal      | 0            | 0        | 70,005       | .3       | 83,885       | .4       | 91,465       | .5       |
| Pima       | 0            | 0        | 23,894       | *        | 0            | 0        | 30,668       | .2       |
| Greenlee   | 0            | 0        | 0            | 0        | 0            | 0        | 0            | 0        |
| TOTAL      | 14,781,894   | 100.0%   | 22,885,059   | 100.0%   | 22,546,296   | 100.0%   | 17,887,733   | 100.0%   |

\*Indicates % less than .1

Boat and person use days are analyzed by state of registration in the next two tables (Tables 22 and 23). The following key findings are evident in these tables:

- ! California boaters account for 48.9 percent of boat use days followed by Arizona boaters with 44.0 percent and Nevada boaters with 7.1 percent. These figures represent decreased boat use days among boaters from each of the three states included in this study.
- ! California boaters also account for the largest share of person use days. Thus we find that California boaters account for 53.6 percent of person use days followed by 39.4 percent for Arizona boaters and 7.0 percent for Nevada boaters. As in the prior studies, the primary reason for California's high percentage is the fact that California boaters tend to have very large boating parties.

TABLE 22: BOAT USE DAYS BY COUNTY AND STATE (2 WEEK DATA)

| COUNTY                    | TOTAL     | STATE OF REGISTRATION |            |         |
|---------------------------|-----------|-----------------------|------------|---------|
|                           |           | Arizona               | California | Nevada  |
| Mohave                    | 1,318,838 | 271,491               | 856,731    | 190,616 |
| Maricopa                  | 650,668   | 584,778               | 65,889     | 0       |
| La Paz                    | 442,153   | 78,823                | 353,824    | 9,506   |
| Coconino                  | 320,626   | 160,633               | 144,834    | 15,159  |
| Yuma                      | 216,476   | 47,412                | 156,330    | 12,734  |
| Gila                      | 161,640   | 159,676               | 1,964      | 0       |
| Santa Cruz                | 48,881    | 48,881                | 0          | 0       |
| Apache                    | 35,348    | 35,348                | 0          | 0       |
| Cochise                   | 22,998    | 22,145                | 0          | 853     |
| Navajo                    | 5,203     | 5,203                 | 0          | 0       |
| Yavapai                   | 3,721     | 3,721                 | 0          | 0       |
| Graham                    | 2,602     | 2,602                 | 0          | 0       |
| Pinal                     | 0         | 0                     | 0          | 0       |
| Pima                      | 0         | 0                     | 0          | 0       |
| Greenlee                  | 0         | 0                     | 0          | 0       |
| TOTAL - 2003              | 3,229,153 | 1,420,711             | 1,579,573  | 228,869 |
| TOTAL - 2000 <sup>1</sup> | 4,958,757 | 2,129,455             | 1,814,187  | 890,175 |
| TOTAL - 1997              | 4,502,856 | 1,968,519             | 2,288,177  | 246,160 |
| TOTAL - 1994              | 4,212,044 | 2,181,955             | 1,846,329  | 183,760 |

<sup>1</sup>Includes 124,940 Utah days

TABLE 23: PERSON USE DAYS BY COUNTY AND STATE (2 WEEK DATA)

| COUNTY                    | TOTAL      | STATE OF REGISTRATION |            |           |
|---------------------------|------------|-----------------------|------------|-----------|
|                           |            | Arizona               | California | Nevada    |
| Mohave                    | 6,437,111  | 1,148,438             | 4,424,071  | 864,603   |
| Maricopa                  | 2,478,485  | 2,360,432             | 118,053    | 0         |
| La Paz                    | 2,238,893  | 366,734               | 1,833,638  | 38,521    |
| Coconino                  | 1,511,979  | 778,266               | 639,553    | 94,160    |
| Yuma                      | 1,067,745  | 134,415               | 895,127    | 38,203    |
| Gila                      | 674,120    | 668,228               | 5,892      | 0         |
| Santa Cruz                | 179,535    | 179,535               | 0          | 0         |
| Apache                    | 111,920    | 111,920               | 0          | 0         |
| Cochise                   | 54,103     | 50,689                | 0          | 3,414     |
| Navajo                    | 19,078     | 19,078                | 0          | 0         |
| Graham                    | 5,203      | 5,203                 | 0          | 0         |
| Yavapai                   | 3,721      | 3,721                 | 0          | 0         |
| Pinal                     | 0          | 0                     | 0          | 0         |
| Pima                      | 0          | 0                     | 0          | 0         |
| Greenlee                  | 0          | 0                     | 0          | 0         |
| TOTAL - 2003              | 14,781,894 | 5,826,659             | 7,916,334  | 1,038,901 |
| TOTAL - 2000 <sup>1</sup> | 22,885,059 | 9,007,475             | 9,440,324  | 3,565,658 |
| TOTAL - 1997              | 22,546,286 | 9,310,912             | 12,363,516 | 871,808   |
| TOTAL - 1994              | 17,887,733 | 8,489,060             | 8,655,211  | 743,462   |

<sup>1</sup>Includes 871,602 Utah days

On the next table it may be seen that Lake Havasu continues to be the state's most utilized lake in terms of both boat use days (679,273) and person use days (3,265,670). Each of these figures is down sharply from 2000 (1,132,597 boat use days/5,476,646 person use days).

TABLE 24: WATERCRAFT USE BY SPECIFIC LAKES/RIVERS (2 WEEK DATA)

| LAKE                          | BOAT<br>USE DAYS | PERSON<br>USE DAYS |
|-------------------------------|------------------|--------------------|
| Lake Havasu                   | 679,273          | 3,265,670          |
| Lake Mohave                   | 411,546          | 2,160,263          |
| Parker Strip                  | 306,170          | 1,676,113          |
| Lake Powell                   | 299,722          | 1,437,168          |
| Lake Mead                     | 268,972          | 1,247,918          |
| Pleasant                      | 235,015          | 812,431            |
| Martinez                      | 182,408          | 937,730            |
| Roosevelt                     | 150,344          | 651,529            |
| Saguaro                       | 142,453          | 556,171            |
| Apache                        | 139,092          | 545,117            |
| Bartlett                      | 78,819           | 310,292            |
| Alamo                         | 54,448           | 181,781            |
| Canyon                        | 50,470           | 246,052            |
| Patagonia                     | 46,279           | 174,332            |
| Mittry                        | 23,662           | 98,796             |
| Parker Canyon                 | 22,998           | 54,103             |
| Hawley                        | 18,102           | 52,914             |
| Davis Dam to Topock<br>Gorge  | 15,891           | 60,299             |
| Willow Springs                | 15,870           | 65,875             |
| Head Rock Dam to<br>Ehrenberg | 13,608           | 54,432             |
| Reservation                   | 12,257           | 41,223             |
| San Carlos                    | 11,296           | 22,591             |
| Squaw                         | 10,406           | 31,219             |
| Topock Gorge                  | 9,844            | 23,327             |
| Show Low                      | 5,203            | 19,078             |
| Woods Canyon                  | 3,733            | 6,335              |
| Lynx                          | 3,721            | 3,721              |
| Pena Blanca                   | 2,602            | 5,203              |
| Roper                         | 2,602            | 5,203              |
| Sunrise                       | 2,602            | 13,008             |
| Big                           | 2,387            | 4,774              |
| Horseshoe                     | 2,387            | 4,774              |
| Lees Ferry                    | 1,301            | 2,602              |
| Grand Canyon                  | 1,240            | 6,202              |
| Tempe Town                    | 1,216            | 1,216              |
| Verde River                   | <u>1,216</u>     | <u>2,432</u>       |
| TOTAL                         | 3,229,153        | 14,781,894         |

On the following pages are presented detailed tables on watercraft usage in Arizona. These tables are presented on a state-by-state basis.

**TABLE 25: WATERCRAFT USAGE: ARIZONA REGISTERED BOATS (2 WEEK DATA)**

| COUNTY: APACHE   | BOAT CLASS |   |       |      |   |   |   |   |   | BOAT<br>USE DAYS | MEAN<br>PARTY SIZE | PERSON<br>USE DAYS |
|------------------|------------|---|-------|------|---|---|---|---|---|------------------|--------------------|--------------------|
| Lake             | 1          | 2 | 3     | 4    | 5 | 6 | 7 | 8 | 9 |                  |                    |                    |
| Becker           | 0          | 0 | 0     | 0    | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Big              | 0          | 0 | 2387  | 0    | 0 | 0 | 0 | 0 | 0 | 2387             | 2.00               | 4774               |
| Bunch            | 0          | 0 | 0     | 0    | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Concho           | 0          | 0 | 0     | 0    | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Crescent         | 0          | 0 | 0     | 0    | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Drift Fence      | 0          | 0 | 0     | 0    | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Hawley           | 0          | 0 | 8355  | 9748 | 0 | 0 | 0 | 0 | 0 | 18102            | 2.92               | 52914              |
| Luna             | 0          | 0 | 0     | 0    | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Lyman            | 0          | 0 | 0     | 0    | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Mexican Hay      | 0          | 0 | 0     | 0    | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Nelson Reservoir | 0          | 0 | 0     | 0    | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Reservation      | 3902       | 0 | 8355  | 0    | 0 | 0 | 0 | 0 | 0 | 12257            | 3.36               | 41223              |
| Sunrise          | 2602       | 0 | 0     | 0    | 0 | 0 | 0 | 0 | 0 | 2602             | 5.00               | 13008              |
| TOTAL            | 6504       | 0 | 19096 | 9748 | 0 | 0 | 0 | 0 | 0 | 35348            |                    | 111920             |

| COUNTY: COCHISE | BOAT CLASS |   |      |      |   |   |   |   |   | BOAT<br>USE DAYS | MEAN<br>PARTY SIZE | PERSON<br>USE DAYS |
|-----------------|------------|---|------|------|---|---|---|---|---|------------------|--------------------|--------------------|
| Lake            | 1          | 2 | 3    | 4    | 5 | 6 | 7 | 8 | 9 |                  |                    |                    |
| Parker Canyon   | 6504       | 0 | 9548 | 6092 | 0 | 0 | 0 | 0 | 0 | 22145            | 2.29               | 50689              |
| TOTAL           | 6504       | 0 | 9548 | 6092 | 0 | 0 | 0 | 0 | 0 | 22145            |                    | 50689              |

| COUNTY: COCONINO | BOAT CLASS |       |   |       |       |   |       |       |   | BOAT<br>USE DAYS | MEAN<br>PARTY SIZE | PERSON<br>USE DAYS |
|------------------|------------|-------|---|-------|-------|---|-------|-------|---|------------------|--------------------|--------------------|
| Lake             | 1          | 2     | 3 | 4     | 5     | 6 | 7     | 8     | 9 |                  |                    |                    |
| Ashurst          | 0          | 0     | 0 | 0     | 0     | 0 | 0     | 0     | 0 | 0                | 0.00               | 0                  |
| Bear Canyon      | 0          | 0     | 0 | 0     | 0     | 0 | 0     | 0     | 0 | 0                | 0.00               | 0                  |
| Blue Ridge       | 0          | 0     | 0 | 0     | 0     | 0 | 0     | 0     | 0 | 0                | 0.00               | 0                  |
| Cataract         | 0          | 0     | 0 | 0     | 0     | 0 | 0     | 0     | 0 | 0                | 0.00               | 0                  |
| Dogtown          | 0          | 0     | 0 | 0     | 0     | 0 | 0     | 0     | 0 | 0                | 0.00               | 0                  |
| Kaibab           | 0          | 0     | 0 | 0     | 0     | 0 | 0     | 0     | 0 | 0                | 0.00               | 0                  |
| Knoll            | 0          | 0     | 0 | 0     | 0     | 0 | 0     | 0     | 0 | 0                | 0.00               | 0                  |
| Lake Powell      | 6504       | 46211 | 0 | 14622 | 43411 | 0 | 11928 | 21802 | 0 | 144478           | 4.97               | 717901             |
| Lees Ferry       | 1301       | 0     | 0 | 0     | 0     | 0 | 0     | 0     | 0 | 1301             | 2.00               | 2602               |
| Long             | 0          | 0     | 0 | 0     | 0     | 0 | 0     | 0     | 0 | 0                | 0.00               | 0                  |
| Mormon           | 0          | 0     | 0 | 0     | 0     | 0 | 0     | 0     | 0 | 0                | 0.00               | 0                  |
| Upper Lake Mary  | 0          | 0     | 0 | 0     | 0     | 0 | 0     | 0     | 0 | 0                | 0.00               | 0                  |
| Whitehorse       | 0          | 0     | 0 | 0     | 0     | 0 | 0     | 0     | 0 | 0                | 0.00               | 0                  |
| Willow Springs   | 2602       | 4864  | 0 | 3655  | 0     | 0 | 0     | 0     | 0 | 11121            | 4.62               | 51429              |
| Woods Canyon     | 1301       | 2432  | 0 | 0     | 0     | 0 | 0     | 0     | 0 | 3733             | 1.70               | 6335               |
| TOTAL            | 11707      | 53508 | 0 | 18277 | 43411 | 0 | 11928 | 21802 | 0 | 160633           |                    | 778266             |

TABLE 25: WATERCRAFT USAGE: ARIZONA REGISTERED BOATS (2 WEEK DATA)

| COUNTY: GILA | BOAT CLASS |       |      |       |       |   |   |   |   | BOAT<br>USE DAYS | MEAN<br>PARTY SIZE | PERSON<br>USE DAYS |
|--------------|------------|-------|------|-------|-------|---|---|---|---|------------------|--------------------|--------------------|
| Lake         | 1          | 2     | 3    | 4     | 5     | 6 | 7 | 8 | 9 |                  |                    |                    |
| Roosevelt    | 26016      | 23106 | 2387 | 62142 | 34729 | 0 | 0 | 0 | 0 | 148380           | 4.35               | 645637             |
| San Carlos   | 5203       | 0     | 0    | 6092  | 0     | 0 | 0 | 0 | 0 | 11296            | 2.00               | 22591              |
| TOTAL        | 31219      | 23106 | 2387 | 68235 | 34729 | 0 | 0 | 0 | 0 | 159676           |                    | 668228             |

| COUNTY: GRAHAM | BOAT CLASS |   |   |   |   |   |   |   |   | BOAT<br>USE DAYS | MEAN<br>PARTY SIZE | PERSON<br>USE DAYS |
|----------------|------------|---|---|---|---|---|---|---|---|------------------|--------------------|--------------------|
| Lake           | 1          | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |                  |                    |                    |
| Roper          | 2602       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2602             | 2.00               | 5203               |
| TOTAL          | 2602       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2602             |                    | 5203               |

| COUNTY: LA PAZ            | BOAT CLASS |       |   |       |       |     |      |      |   | BOAT<br>USE DAYS | MEAN<br>PARTY SIZE | PERSON<br>USE DAYS |
|---------------------------|------------|-------|---|-------|-------|-----|------|------|---|------------------|--------------------|--------------------|
| Lake                      | 1          | 2     | 3 | 4     | 5     | 6   | 7    | 8    | 9 |                  |                    |                    |
| Alamo                     | 6504       | 0     | 0 | 10966 | 4961  | 0   | 0    | 0    | 0 | 22432            | 4.55               | 102035             |
| Ehrenberg                 | 0          | 0     | 0 | 0     | 0     | 0   | 0    | 0    | 0 | 0                | 0.00               | 0                  |
| Ehrenberg to north end of | 0          | 0     | 0 | 0     | 0     | 0   | 0    | 0    | 0 | 0                | 0.00               | 0                  |
| Lake Havasu               | 0          | 3648  | 0 | 4508  | 6326  | 779 | 2045 | 1363 | 0 | 18668            | 4.01               | 74845              |
| Parker Strip              | 0          | 36482 | 0 | 0     | 1240  | 0   | 0    | 0    | 0 | 37723            | 5.03               | 189854             |
| TOTAL                     | 6504       | 40131 | 0 | 15475 | 12527 | 779 | 2045 | 1363 | 0 | 78823            |                    | 366734             |

| COUNTY: MARICOPA | BOAT CLASS |        |       |        |        |       |      |       |      | BOAT<br>USE DAYS | MEAN<br>PARTY SIZE | PERSON<br>USE DAYS |
|------------------|------------|--------|-------|--------|--------|-------|------|-------|------|------------------|--------------------|--------------------|
| Lake             | 1          | 2      | 3     | 4      | 5      | 6     | 7    | 8     | 9    |                  |                    |                    |
| Apache           | 2602       | 24322  | 2387  | 32899  | 21085  | 0     | 0    | 3634  | 0    | 86928            | 5.07               | 440791             |
| Bartlett         | 9106       | 8513   | 0     | 28025  | 29768  | 0     | 3408 | 0     | 0    | 78819            | 3.94               | 310292             |
| Canyon           | 0          | 15809  | 1194  | 10966  | 21085  | 1416  | 0    | 0     | 0    | 50470            | 4.88               | 246052             |
| Horseshoe        | 0          | 0      | 2387  | 0      | 0      | 0     | 0    | 0     | 0    | 2387             | 2.00               | 4774               |
| Pleasant         | 39024      | 51075  | 5968  | 48739  | 45892  | 9204  | 0    | 18168 | 3219 | 221289           | 3.61               | 798705             |
| Saguaro          | 5203       | 21889  | 1194  | 45084  | 62016  | 708   | 0    | 6359  | 0    | 142453           | 3.90               | 556171             |
| Salt River       | 0          | 0      | 0     | 0      | 0      | 0     | 0    | 0     | 0    | 0                | 0.00               | 0                  |
| Tempe Town       | 0          | 1216   | 0     | 0      | 0      | 0     | 0    | 0     | 0    | 1216             | 1.00               | 1216               |
| Verde River      | 0          | 1216   | 0     | 0      | 0      | 0     | 0    | 0     | 0    | 1216             | 2.00               | 2432               |
| TOTAL            | 55934      | 124040 | 13129 | 165713 | 179846 | 11328 | 3408 | 28160 | 3219 | 584778           |                    | 2360432            |

**TABLE 25: WATERCRAFT USAGE: ARIZONA REGISTERED BOATS (2 WEEK DATA)**

| COUNTY: MOHAVE   | BOAT CLASS |       |   |       |       |      |       |       |   | BOAT<br>USE DAYS | MEAN<br>PARTY SIZE | PERSON<br>USE DAYS |
|------------------|------------|-------|---|-------|-------|------|-------|-------|---|------------------|--------------------|--------------------|
| Lake             | 1          | 2     | 3 | 4     | 5     | 6    | 7     | 8     | 9 |                  |                    |                    |
| Davis Dam/Topock | 0          | 6080  | 0 | 0     | 1240  | 0    | 0     | 0     | 0 | 7321             | 4.49               | 32883              |
| Grand Canyon     | 0          | 0     | 0 | 0     | 1240  | 0    | 0     | 0     | 0 | 1240             | 5.00               | 6202               |
| Lake Havasu      | 0          | 32834 | 0 | 40575 | 56931 | 7009 | 18403 | 12263 | 0 | 168016           | 4.01               | 673604             |
| Lake Mead        | 0          | 8513  | 0 | 9748  | 6202  | 0    | 1704  | 12718 | 0 | 38884            | 5.21               | 202590             |
| Lake Mohave      | 10406      | 9729  | 0 | 4874  | 21085 | 0    | 852   | 9084  | 0 | 56030            | 4.16               | 233160             |
| Topock Gorge     | 0          | 0     | 0 | 0     | 0     | 0    | 0     | 0     | 0 | 0                | 0.00               | 0                  |
| TOTAL            | 10406      | 57156 | 0 | 55197 | 86698 | 7009 | 20959 | 34065 | 0 | 271491           |                    | 1148438            |

| COUNTY: NAVAJO | BOAT CLASS |   |   |   |   |   |   |   |   | BOAT<br>USE DAYS | MEAN<br>PARTY SIZE | PERSON<br>USE DAYS |
|----------------|------------|---|---|---|---|---|---|---|---|------------------|--------------------|--------------------|
| Lake           | 1          | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |                  |                    |                    |
| Black Canyon   | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Cholla         | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Clear Creek    | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Cooley         | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Fools Hollow   | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Rainbow        | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Show Low       | 5203       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5203             | 3.67               | 19078              |
| White Mtn      | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| TOTAL          | 5203       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5203             |                    | 19078              |

| COUNTY: PIMA | BOAT CLASS |   |   |   |   |   |   |   |   | BOAT<br>USE DAYS | MEAN<br>PARTY SIZE | PERSON<br>USE DAYS |
|--------------|------------|---|---|---|---|---|---|---|---|------------------|--------------------|--------------------|
| Lake         | 1          | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |                  |                    |                    |
| Arivaca      | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Silverbell   | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| TOTAL        | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                |                    | 0                  |

| COUNTY: PINAL     | BOAT CLASS |   |   |   |   |   |   |   |   | BOAT<br>USE DAYS | MEAN<br>PARTY SIZE | PERSON<br>USE DAYS |
|-------------------|------------|---|---|---|---|---|---|---|---|------------------|--------------------|--------------------|
| Lake              | 1          | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |                  |                    |                    |
| Picacho Reservoir | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| TOTAL             | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                |                    | 0                  |

TABLE 25: WATERCRAFT USAGE: ARIZONA REGISTERED BOATS (2 WEEK DATA)

| COUNTY: SANTA CRUZ | BOAT CLASS |      |      |   |      |   |   |   |   | BOAT<br>USE DAYS | MEAN<br>PARTY SIZE | PERSON<br>USE DAYS |
|--------------------|------------|------|------|---|------|---|---|---|---|------------------|--------------------|--------------------|
| Lake               | 1          | 2    | 3    | 4 | 5    | 6 | 7 | 8 | 9 |                  |                    |                    |
| Patagonia          | 19512      | 7296 | 9548 | 0 | 9923 | 0 | 0 | 0 | 0 | 46279            | 3.77               | 174332             |
| Pena Blanca        | 2602       | 0    | 0    | 0 | 0    | 0 | 0 | 0 | 0 | 2602             | 2.00               | 5203               |
| TOTAL              | 22114      | 7296 | 9548 | 0 | 9923 | 0 | 0 | 0 | 0 | 48881            |                    | 179535             |

| COUNTY: YAVAPAI | BOAT CLASS |   |   |   |      |   |   |   |   | BOAT<br>USE DAYS | MEAN<br>PARTY SIZE | PERSON<br>USE DAYS |
|-----------------|------------|---|---|---|------|---|---|---|---|------------------|--------------------|--------------------|
| Lake            | 1          | 2 | 3 | 4 | 5    | 6 | 7 | 8 | 9 |                  |                    |                    |
| Goldwater       | 0          | 0 | 0 | 0 | 0    | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Lynx            | 0          | 0 | 0 | 0 | 3721 | 0 | 0 | 0 | 0 | 3721             | 1.00               | 3721               |
| TOTAL           | 0          | 0 | 0 | 0 | 3721 | 0 | 0 | 0 | 0 | 3721             |                    | 3721               |

| COUNTY: YUMA  | BOAT CLASS |       |   |      |   |   |   |   |   | BOAT<br>USE DAYS | MEAN<br>PARTY SIZE | PERSON<br>USE DAYS |
|---------------|------------|-------|---|------|---|---|---|---|---|------------------|--------------------|--------------------|
| Lake          | 1          | 2     | 3 | 4    | 5 | 6 | 7 | 8 | 9 |                  |                    |                    |
| Martinez Lake | 1301       | 21889 | 0 | 7311 | 0 | 0 | 0 | 0 | 0 | 30501            | 2.96               | 90188              |
| Mittry        | 6504       | 0     | 0 | 0    | 0 | 0 | 0 | 0 | 0 | 6504             | 2.00               | 13008              |
| Squaw Lake    | 10406      | 0     | 0 | 0    | 0 | 0 | 0 | 0 | 0 | 10406            | 3.00               | 31219              |
| TOTAL         | 18211      | 21889 | 0 | 7311 | 0 | 0 | 0 | 0 | 0 | 47412            |                    | 134415             |

**TABLE 26: WATERCRAFT USAGE: CALIFORNIA REGISTERED BOATS (2 WEEK DATA)**

| COUNTY:          | APACHE | BOAT CLASS |   |   |   |   |   |   |   | BOAT<br>USE DAYS | MEAN<br>PARTY SIZE | PERSON<br>USE DAYS |
|------------------|--------|------------|---|---|---|---|---|---|---|------------------|--------------------|--------------------|
| Lake             | 1      | 2          | 3 | 4 | 5 | 6 | 7 | 8 | 9 |                  |                    |                    |
| Becker           | 0      | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Big              | 0      | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Bunch            | 0      | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Concho           | 0      | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Cresent          | 0      | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Drift Fence      | 0      | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Hawley           | 0      | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Luna             | 0      | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Lyman            | 0      | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Mexican Hay      | 0      | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Nelson Reservoir | 0      | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Reservation      | 0      | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Sunrise          | 0      | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| TOTAL            | 0      | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                |                    | 0                  |

| COUNTY:       | BOAT CLASS |   |   |   |   |   |   |   |   | BOAT<br>USE DAYS | MEAN<br>PARTY SIZE | PERSON<br>USE DAYS |
|---------------|------------|---|---|---|---|---|---|---|---|------------------|--------------------|--------------------|
| COCHISE       |            |   |   |   |   |   |   |   |   |                  |                    |                    |
| Lake          | 1          | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |                  |                    |                    |
| Parker Canyon | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| TOTAL         | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                |                    | 0                  |

| COUNTY:         | BOAT CLASS |       |   |   |       |   |   |   |   | BOAT<br>USE DAYS | MEAN<br>PARTY SIZE | PERSON<br>USE DAYS |
|-----------------|------------|-------|---|---|-------|---|---|---|---|------------------|--------------------|--------------------|
| COCONINO        |            |       |   |   |       |   |   |   |   |                  |                    |                    |
| Lake            | 1          | 2     | 3 | 4 | 5     | 6 | 7 | 8 | 9 |                  |                    |                    |
| Ashurst         | 0          | 0     | 0 | 0 | 0     | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Bear Canyon     | 0          | 0     | 0 | 0 | 0     | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Blue Ridge      | 0          | 0     | 0 | 0 | 0     | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Cataract        | 0          | 0     | 0 | 0 | 0     | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Dogtown         | 0          | 0     | 0 | 0 | 0     | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Kaibab          | 0          | 0     | 0 | 0 | 0     | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Knoll           | 0          | 0     | 0 | 0 | 0     | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Lake Powell     | 56176      | 24021 | 0 | 0 | 64638 | 0 | 0 | 0 | 0 | 144834           | 4.42               | 639553             |
| Lees Ferry      | 0          | 0     | 0 | 0 | 0     | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Long            | 0          | 0     | 0 | 0 | 0     | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Mormon          | 0          | 0     | 0 | 0 | 0     | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Upper Lake Mary | 0          | 0     | 0 | 0 | 0     | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Whitehorse      | 0          | 0     | 0 | 0 | 0     | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Willow Springs  | 0          | 0     | 0 | 0 | 0     | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Woods Canyon    | 0          | 0     | 0 | 0 | 0     | 0 | 0 | 0 | 0 | 0                | 0.00               |                    |
| TOTAL           | 56176      | 24021 | 0 | 0 | 64638 | 0 | 0 | 0 | 0 | 144834           |                    | 639553             |

**TABLE 26: WATERCRAFT USAGE: CALIFORNIA REGISTERED BOATS (2 WEEK DATA)**

| COUNTY:    | BOAT CLASS |   |   |   |   |   |   |      |   | BOAT<br>USE DAYS | MEAN<br>PARTY SIZE | PERSON<br>USE DAYS |
|------------|------------|---|---|---|---|---|---|------|---|------------------|--------------------|--------------------|
| GILA       |            |   |   |   |   |   |   |      |   |                  |                    |                    |
| Lake       | 1          | 2 | 3 | 4 | 5 | 6 | 7 | 8    | 9 |                  |                    |                    |
| Roosevelt  | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 1964 | 0 | 1964             | 3.00               | 5892               |
| San Carlos | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0    | 0 | 0                | 0.00               | 0                  |
| TOTAL      | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 1964 | 0 | 1964             |                    | 5892               |

| COUNTY: | BOAT CLASS |   |   |   |   |   |   |   |   | BOAT<br>USE DAYS | MEAN<br>PARTY SIZE | PERSON<br>USE DAYS |
|---------|------------|---|---|---|---|---|---|---|---|------------------|--------------------|--------------------|
| GRAHAM  |            |   |   |   |   |   |   |   |   |                  |                    |                    |
| Lake    | 1          | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |                  |                    |                    |
| Roper   | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| TOTAL   | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                |                    | 0                  |

| COUNTY:                          | BOAT CLASS |        |   |       |       |   |     |      |   | BOAT<br>USE DAYS | MEAN<br>PARTY SIZE | PERSON<br>USE DAYS |
|----------------------------------|------------|--------|---|-------|-------|---|-----|------|---|------------------|--------------------|--------------------|
| LA PAZ                           |            |        |   |       |       |   |     |      |   |                  |                    |                    |
| Lake                             | 1          | 2      | 3 | 4     | 5     | 6 | 7   | 8    | 9 |                  |                    |                    |
| Alamo                            | 28088      | 0      | 0 | 0     | 0     | 0 | 0   | 3928 | 0 | 32016            | 2.49               | 79746              |
| Ehrenberg                        | 0          | 0      | 0 | 0     | 13608 | 0 | 0   | 0    | 0 | 13608            | 4.00               | 54432              |
| Ehrenberg to north end of Martin | 0          | 0      | 0 | 0     | 0     | 0 | 0   | 0    | 0 | 0                | 0.00               | 0                  |
| Lake Havasu                      | 401        | 30541  | 0 | 11048 | 5443  | 0 | 228 | 393  | 0 | 48054            | 5.03               | 241913             |
| Parker Strip                     | 0          | 185302 | 0 | 0     | 74844 | 0 | 0   | 0    | 0 | 260146           | 5.60               | 1457548            |
| TOTAL                            | 28489      | 215843 | 0 | 11048 | 93895 | 0 | 228 | 4321 | 0 | 353824           |                    | 1833638            |

| COUNTY:     | BOAT CLASS |       |   |   |   |   |   |   |   | BOAT<br>USE DAYS | MEAN<br>PARTY SIZE | PERSON<br>USE DAYS |
|-------------|------------|-------|---|---|---|---|---|---|---|------------------|--------------------|--------------------|
| MARICOPA    |            |       |   |   |   |   |   |   |   |                  |                    |                    |
| Lake        | 1          | 2     | 3 | 4 | 5 | 6 | 7 | 8 | 9 |                  |                    |                    |
| Apache      | 52163      | 0     | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 52163            | 2.00               | 104327             |
| Bartlett    | 0          | 0     | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Canyon      | 0          | 0     | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Horseshoe   | 0          | 0     | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Pleasant    | 0          | 13726 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13726            | 1.00               | 13726              |
| Saguaro     | 0          | 0     | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Salt River  | 0          | 0     | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Tempe Town  | 0          | 0     | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Verde River | 0          | 0     | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| TOTAL       | 52163      | 13726 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 65889            |                    | 118053             |

**TABLE 26: WATERCRAFT USAGE: CALIFORNIA REGISTERED BOATS (2 WEEK DATA)**

| COUNTY: MOHAVE   | BOAT CLASS |        |   |        |       |      |      |      |   | BOAT<br>USE DAYS | MEAN<br>PARTY SIZE | PERSON<br>USE DAYS |
|------------------|------------|--------|---|--------|-------|------|------|------|---|------------------|--------------------|--------------------|
| Lake             | 1          | 2      | 3 | 4      | 5     | 6    | 7    | 8    | 9 |                  |                    |                    |
| Davis Dam/Topock | 0          | 6863   | 0 | 0      | 0     | 0    | 0    | 0    | 0 | 6863             | 3.00               | 20589              |
| Grand Canyon     | 0          | 0      | 0 | 0      | 0     | 0    | 0    | 0    | 0 | 0                | 0.00               | 0                  |
| Lake Havasu      | 3611       | 274865 | 0 | 99430  | 48989 | 0    | 2054 | 3535 | 0 | 432484           | 5.03               | 2177214            |
| Lake Mead        | 12038      | 51473  | 0 | 16247  | 6804  | 0    | 0    | 0    | 0 | 86561            | 4.58               | 396445             |
| Lake Mohave      | 0          | 277953 | 0 | 9748   | 27216 | 7880 | 0    | 0    | 0 | 322797           | 5.62               | 1813772            |
| Davis Dam/Topock | 0          | 6863   | 0 | 0      | 0     | 0    | 0    | 0    | 0 | 6863             | 3.00               | 20589              |
| Topock Gorge     | 8025       | 0      | 0 | 0      | 0     | 0    | 0    | 0    | 0 | 8025             | 2.00               | 16050              |
| TOTAL            | 23674      | 611154 | 0 | 125425 | 83009 | 7880 | 2054 | 3535 | 0 | 856731           |                    | 4424071            |

| COUNTY: NAVAJO | BOAT CLASS |   |   |   |   |   |   |   |   | BOAT<br>USE DAYS | MEAN<br>PARTY SIZE | PERSON<br>USE DAYS |
|----------------|------------|---|---|---|---|---|---|---|---|------------------|--------------------|--------------------|
| Lake           | 1          | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |                  |                    |                    |
| Black Canyon   | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Cholla         | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Clear Creek    | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Cooley         | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Fools Hollow   | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Rainbow        | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Show Low       | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| White Mtn      | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| TOTAL          | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                |                    | 0                  |

| COUNTY: PIMA | BOAT CLASS |   |   |   |   |   |   |   |   | BOAT<br>USE DAYS | MEAN<br>PARTY SIZE | PERSON<br>USE DAYS |
|--------------|------------|---|---|---|---|---|---|---|---|------------------|--------------------|--------------------|
| Lake         | 1          | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |                  |                    |                    |
| Arivaca      | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Silverbell   | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| TOTAL        | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                |                    | 0                  |

| COUNTY: PINAL     | BOAT CLASS |   |   |   |   |   |   |   |   | BOAT<br>USE DAYS | MEAN<br>PARTY SIZE | PERSON<br>USE DAYS |
|-------------------|------------|---|---|---|---|---|---|---|---|------------------|--------------------|--------------------|
| Lake              | 1          | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |                  |                    |                    |
| Picacho Reservoir | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| TOTAL             | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                |                    | 0                  |

TABLE 26: WATERCRAFT USAGE: CALIFORNIA REGISTERED BOATS (2 WEEK DATA)

| COUNTY: SANTA CRUZ | BOAT CLASS |   |   |   |   |   |   |   |   | BOAT<br>USE DAYS | MEAN<br>PARTY SIZE | PERSON<br>USE DAYS |
|--------------------|------------|---|---|---|---|---|---|---|---|------------------|--------------------|--------------------|
| Lake               | 1          | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |                  |                    |                    |
| Patagonia          | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Pena Blanca        | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| TOTAL              | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                |                    | 0                  |

| COUNTY: YAVAPAI | BOAT CLASS |   |   |   |   |   |   |   |   | BOAT<br>USE DAYS | MEAN<br>PARTY SIZE | PERSON<br>USE DAYS |
|-----------------|------------|---|---|---|---|---|---|---|---|------------------|--------------------|--------------------|
| Lake            | 1          | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |                  |                    |                    |
| Goldwater       | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Lynx            | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| TOTAL           | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                |                    | 0                  |

| COUNTY: YUMA  | BOAT CLASS |        |   |       |       |   |      |   |   | BOAT<br>USE DAYS | MEAN<br>PARTY SIZE | PERSON<br>USE DAYS |
|---------------|------------|--------|---|-------|-------|---|------|---|---|------------------|--------------------|--------------------|
| Lake          | 1          | 2      | 3 | 4     | 5     | 6 | 7    | 8 | 9 |                  |                    |                    |
| Martinez Lake | 0          | 85788  | 0 | 22746 | 27216 | 0 | 3423 | 0 | 0 | 139172           | 5.82               | 809339             |
| Mittry        | 0          | 17158  | 0 | 0     | 0     | 0 | 0    | 0 | 0 | 17158            | 5.00               | 85788              |
| Squaw Lake    | 0          | 0      | 0 | 0     | 0     | 0 | 0    | 0 | 0 | 0                | 0.00               | 0                  |
| TOTAL         | 0          | 102946 | 0 | 22746 | 27216 | 0 | 3423 | 0 | 0 | 156330           |                    | 895127             |

**TABLE 27: WATERCRAFT USAGE: NEVADA REGISTERED BOATS (2 WEEK DATA)**

| COUNTY:          | BOAT CLASS |   |   |   |   |   |   |   |   | BOAT<br>USE DAYS | MEAN<br>PARTY SIZE | PERSON<br>USE DAYS |
|------------------|------------|---|---|---|---|---|---|---|---|------------------|--------------------|--------------------|
| APACHE           |            |   |   |   |   |   |   |   |   |                  |                    |                    |
| Lake             | 1          | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |                  |                    |                    |
| Becker           | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Big              | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Bunch            | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Concho           | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Crescent         | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Drift Fence      | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Hawley           | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Luna             | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Lyman            | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Mexican Hay      | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Nelson Reservoir | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Reservation      | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Sunrise          | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| TOTAL            | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                |                    | 0                  |

| COUNTY:       | BOAT CLASS |     |   |   |   |   |   |   |   | BOAT<br>USE DAYS | MEAN<br>PARTY SIZE | PERSON<br>USE DAYS |
|---------------|------------|-----|---|---|---|---|---|---|---|------------------|--------------------|--------------------|
| COCHISE       |            |     |   |   |   |   |   |   |   |                  |                    |                    |
| Lake          | 1          | 2   | 3 | 4 | 5 | 6 | 7 | 8 | 9 |                  |                    |                    |
| Parker Canyon | 0          | 853 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 853              | 4.00               | 3414               |
| TOTAL         | 0          | 853 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 853              |                    | 3414               |

| COUNTY:         | BOAT CLASS |   |   |      |     |   |     |      |   | BOAT<br>USE DAYS | MEAN<br>PARTY SIZE | PERSON<br>USE DAYS |
|-----------------|------------|---|---|------|-----|---|-----|------|---|------------------|--------------------|--------------------|
| COCONINO        |            |   |   |      |     |   |     |      |   |                  |                    |                    |
| Lake            | 1          | 2 | 3 | 4    | 5   | 6 | 7   | 8    | 9 |                  |                    |                    |
| Ashurst         | 0          | 0 | 0 | 0    | 0   | 0 | 0   | 0    | 0 | 0                | 0.00               | 0                  |
| Bear Canyon     | 0          | 0 | 0 | 0    | 0   | 0 | 0   | 0    | 0 | 0                | 0.00               | 0                  |
| Blue Ridge      | 0          | 0 | 0 | 0    | 0   | 0 | 0   | 0    | 0 | 0                | 0.00               | 0                  |
| Cataract        | 0          | 0 | 0 | 0    | 0   | 0 | 0   | 0    | 0 | 0                | 0.00               | 0                  |
| Dogtown         | 0          | 0 | 0 | 0    | 0   | 0 | 0   | 0    | 0 | 0                | 0.00               | 0                  |
| Kaibab          | 0          | 0 | 0 | 0    | 0   | 0 | 0   | 0    | 0 | 0                | 0.00               | 0                  |
| Knoll           | 0          | 0 | 0 | 0    | 0   | 0 | 0   | 0    | 0 | 0                | 0.00               | 0                  |
| Lake Powell     | 0          | 0 | 0 | 0    | 892 | 0 | 0   | 9518 | 0 | 10410            | 7.66               | 79714              |
| Lees Ferry      | 0          | 0 | 0 | 0    | 0   | 0 | 0   | 0    | 0 | 0                | 0.00               | 0                  |
| Long            | 0          | 0 | 0 | 0    | 0   | 0 | 0   | 0    | 0 | 0                | 0.00               | 0                  |
| Mormon          | 0          | 0 | 0 | 0    | 0   | 0 | 0   | 0    | 0 | 0                | 0.00               | 0                  |
| Upper Lake Mary | 0          | 0 | 0 | 0    | 0   | 0 | 0   | 0    | 0 | 0                | 0.00               | 0                  |
| Whitehorse      | 0          | 0 | 0 | 0    | 0   | 0 | 0   | 0    | 0 | 0                | 0.00               | 0                  |
| Willow Springs  | 0          | 0 | 0 | 4548 | 0   | 0 | 201 | 0    | 0 | 4749             | 3.04               | 14447              |
| Woods Canyon    | 0          | 0 | 0 | 0    | 0   | 0 | 0   | 0    | 0 | 0                | 0.00               | 0                  |
| TOTAL           | 0          | 0 | 0 | 4548 | 892 | 0 | 201 | 9518 | 0 | 15159            |                    | 94160              |

**TABLE 27: WATERCRAFT USAGE: NEVADA REGISTERED BOATS (2 WEEK DATA)**

| COUNTY:    | BOAT CLASS |   |   |   |   |   |   |   |   | BOAT<br>USE DAYS | MEAN<br>PARTY SIZE | PERSON<br>USE DAYS |
|------------|------------|---|---|---|---|---|---|---|---|------------------|--------------------|--------------------|
| GILA       |            |   |   |   |   |   |   |   |   |                  |                    |                    |
| Lake       | 1          | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |                  |                    |                    |
| Roosevelt  | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| San Carlos | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| TOTAL      | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                |                    | 0                  |

| COUNTY: | BOAT CLASS |   |   |   |   |   |   |   |   | BOAT<br>USE DAYS | MEAN<br>PARTY SIZE | PERSON<br>USE DAYS |
|---------|------------|---|---|---|---|---|---|---|---|------------------|--------------------|--------------------|
| GRAHAM  |            |   |   |   |   |   |   |   |   |                  |                    |                    |
| Lake    | 1          | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |                  |                    |                    |
| Roper   | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| TOTAL   | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                |                    | 0                  |

| COUNTY:                   | BOAT CLASS |     |   |      |      |   |    |      |   | BOAT<br>USE DAYS | MEAN<br>PARTY SIZE | PERSON<br>USE DAYS |
|---------------------------|------------|-----|---|------|------|---|----|------|---|------------------|--------------------|--------------------|
| LA PAZ                    |            |     |   |      |      |   |    |      |   |                  |                    |                    |
| Lake                      | 1          | 2   | 3 | 4    | 5    | 6 | 7  | 8    | 9 |                  |                    |                    |
| Alamo                     | 0          | 0   | 0 | 0    | 0    | 0 | 0  | 0    | 0 | 0                | 0.00               | 0                  |
| Ehrenberg                 | 0          | 0   | 0 | 0    | 0    | 0 | 0  | 0    | 0 | 0                | 0.00               | 0                  |
| Ehrenberg to north end of | 0          | 0   | 0 | 0    | 0    | 0 | 0  | 0    | 0 | 0                | 0.00               | 0                  |
| Lake Havasu               | 0          | 768 | 0 | 0    | 357  | 0 | 80 | 0    | 0 | 1205             | 8.14               | 9809               |
| Parker Strip              | 0          | 0   | 0 | 1819 | 2675 | 0 | 0  | 3807 | 0 | 8301             | 3.46               | 28711              |
| TOTAL                     | 0          | 768 | 0 | 1819 | 3031 | 0 | 80 | 3807 | 0 | 9506             |                    | 38521              |

| COUNTY:     | BOAT CLASS |   |   |   |   |   |   |   |   | BOAT<br>USE DAYS | MEAN<br>PARTY SIZE | PERSON<br>USE DAYS |
|-------------|------------|---|---|---|---|---|---|---|---|------------------|--------------------|--------------------|
| MARICOPA    |            |   |   |   |   |   |   |   |   |                  |                    |                    |
| Lake        | 1          | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |                  |                    |                    |
| Apache      | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Bartlett    | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Canyon      | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Horseshoe   | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Pleasant    | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Saguaro     | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Salt River  | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Tempe Town  | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Verde River | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| TOTAL       | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                |                    | 0                  |

**TABLE 27: WATERCRAFT USAGE: NEVADA REGISTERED BOATS (2 WEEK DATA)**

| COUNTY:          | BOAT CLASS |       |   |       |       |     |      |       |     | BOAT<br>USE DAYS | MEAN<br>PARTY SIZE | PERSON<br>USE DAYS |
|------------------|------------|-------|---|-------|-------|-----|------|-------|-----|------------------|--------------------|--------------------|
| MOHAVE           |            |       |   |       |       |     |      |       |     |                  |                    |                    |
| Lake             | 1          | 2     | 3 | 4     | 5     | 6   | 7    | 8     | 9   |                  |                    |                    |
| Alamo            | 0          | 0     | 0 | 0     | 0     | 0   | 0    | 0     | 0   | 0                | 0.00               | 0                  |
| Davis Dam/Topock | 0          | 1707  | 0 | 0     | 0     | 0   | 0    | 0     | 0   | 1707             | 4.00               | 6828               |
| Grand Canyon     | 0          | 0     | 0 | 0     | 0     | 0   | 0    | 0     | 0   | 0                | 0.00               | 0                  |
| Lake Havasu      | 0          | 7681  | 0 | 0     | 3566  | 0   | 803  | 0     | 0   | 12050            | 8.14               | 98095              |
| Lake Mead        | 22212      | 40112 | 0 | 22740 | 46363 | 403 | 0    | 11422 | 275 | 143527           | 4.52               | 648882             |
| Lake Mohave      | 0          | 7681  | 0 | 910   | 10699 | 0   | 2006 | 11422 | 0   | 32718            | 3.46               | 113331             |
| Topock Gorge     | 0          | 0     | 0 | 1819  | 0     | 0   | 0    | 0     | 0   | 1819             | 4.00               | 7277               |
| TOTAL            | 22212      | 56412 | 0 | 25469 | 60272 | 403 | 2729 | 22844 | 275 | 190616           |                    | 864603             |

| COUNTY:      | BOAT CLASS |   |   |   |   |   |   |   |   | BOAT<br>USE DAYS | MEAN<br>PARTY SIZE | PERSON<br>USE DAYS |
|--------------|------------|---|---|---|---|---|---|---|---|------------------|--------------------|--------------------|
| NAVAJO       |            |   |   |   |   |   |   |   |   |                  |                    |                    |
| Lake         | 1          | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |                  |                    |                    |
| Black Canyon | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Cholla       | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Clear Creek  | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Cooley       | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Fools Hollow | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Rainbow      | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Show Low     | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| White Mtn    | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| TOTAL        | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                |                    | 0                  |

| COUNTY:    | BOAT CLASS |   |   |   |   |   |   |   |   | BOAT<br>USE DAYS | MEAN<br>PARTY SIZE | PERSON<br>USE DAYS |
|------------|------------|---|---|---|---|---|---|---|---|------------------|--------------------|--------------------|
| PIMA       |            |   |   |   |   |   |   |   |   |                  |                    |                    |
| Lake       | 1          | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |                  |                    |                    |
| Arivaca    | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Silverbell | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| TOTAL      | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                |                    | 0                  |

| COUNTY:           | BOAT CLASS |   |   |   |   |   |   |   |   | BOAT<br>USE DAYS | MEAN<br>PARTY SIZE | PERSON<br>USE DAYS |
|-------------------|------------|---|---|---|---|---|---|---|---|------------------|--------------------|--------------------|
| PINAL             |            |   |   |   |   |   |   |   |   |                  |                    |                    |
| Lake              | 1          | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |                  |                    |                    |
| Picacho Reservoir | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| TOTAL             | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                |                    | 0                  |

TABLE 27: WATERCRAFT USAGE: NEVADA REGISTERED BOATS (2 WEEK DATA)

| COUNTY:     | BOAT CLASS |   |   |   |   |   |   |   |   | BOAT<br>USE DAYS | MEAN<br>PARTY SIZE | PERSON<br>USE DAYS |
|-------------|------------|---|---|---|---|---|---|---|---|------------------|--------------------|--------------------|
| SANTA CRUZ  |            |   |   |   |   |   |   |   |   |                  |                    |                    |
| Lake        | 1          | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |                  |                    |                    |
| Patagonia   | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Pena Blanca | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| TOTAL       | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                |                    | 0                  |

| COUNTY:   | BOAT CLASS |   |   |   |   |   |   |   |   | BOAT<br>USE DAYS | MEAN<br>PARTY SIZE | PERSON<br>USE DAYS |
|-----------|------------|---|---|---|---|---|---|---|---|------------------|--------------------|--------------------|
| YAVAPAI   |            |   |   |   |   |   |   |   |   |                  |                    |                    |
| Lake      | 1          | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |                  |                    |                    |
| Goldwater | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Lynx      | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| TOTAL     | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                |                    | 0                  |

| COUNTY:       | BOAT CLASS |   |   |       |   |   |   |   |   | BOAT<br>USE DAYS | MEAN<br>PARTY SIZE | PERSON<br>USE DAYS |
|---------------|------------|---|---|-------|---|---|---|---|---|------------------|--------------------|--------------------|
| YUMA          |            |   |   |       |   |   |   |   |   |                  |                    |                    |
| Lake          | 1          | 2 | 3 | 4     | 5 | 6 | 7 | 8 | 9 |                  |                    |                    |
| Martinez Lake | 0          | 0 | 0 | 12734 | 0 | 0 | 0 | 0 | 0 | 12734            | 3.00               | 38203              |
| Mittry        | 0          | 0 | 0 | 0     | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| Squaw Lake    | 0          | 0 | 0 | 0     | 0 | 0 | 0 | 0 | 0 | 0                | 0.00               | 0                  |
| TOTAL         | 0          | 0 | 0 | 12734 | 0 | 0 | 0 | 0 | 0 | 12734            |                    | 38203              |

## 6.2 12 Month Data Set

The next series of tables (Table 28 to Table 35) present the boat and person use data based on the 12 month data set.

TABLE 28: BOAT USE DAYS BY COUNTY –  
OVERALL SUMMARY (12 MONTH DATA)

|            | <u>2003</u>  |          | <u>2000</u>  |          |
|------------|--------------|----------|--------------|----------|
|            | <u>Total</u> | <u>%</u> | <u>Total</u> | <u>%</u> |
| Mohave     | 1,010,198    | 49.4%    | 1,387,780    | 56.8%    |
| Maricopa   | 334,043      | 16.3     | 250,430      | 10.3     |
| La Paz     | 299,971      | 14.7     | 215,236      | 8.8      |
| Coconino   | 196,329      | 9.6      | 306,771      | 12.6     |
| Yuma       | 74,294       | 3.6      | 67,217       | 2.8      |
| Gila       | 69,841       | 3.4      | 109,084      | 4.5      |
| Apache     | 31,209       | 1.5      | 40,172       | 1.6      |
| Santa Cruz | 18,224       | .9       | 7,743        | .3       |
| Cochise    | 5,830        | .3       | 12,444       | .5       |
| Navajo     | 4,192        | .2       | 5,390        | .2       |
| Pinal      | 1,469        | *        | 10,123       | .4       |
| Pima       | 881          | *        | 3,345        | .1       |
| Graham     | 0            | 0        | 23,629       | 1.0      |
| Yavapai    | 0            | 0        | 2,367        | .1       |
| Greenlee   | <u>0</u>     | <u>0</u> | <u>0</u>     | <u>0</u> |
| TOTAL      | 2,046,481    | 100.0%   | 2,441,731    | 100.0%   |

\*Indicates % less than .1

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TABLE 29: PERSON USE DAYS BY COUNTY –
OVERALL SUMMARY (12 MONTH DATA)

	<u>2003</u>		<u>2000</u>	
	<u>Total</u>	<u>%</u>	<u>Total</u>	<u>%</u>
Mohave	5,850,043	52.2%	7,118,810	55.7%
La Paz	1,717,705	15.3	1,444,027	11.3
Coconino	1,405,410	12.5	2,075,855	16.3
Maricopa	1,354,593	12.1	1,006,277	7.9
Yuma	411,738	3.7	365,989	2.9
Gila	242,120	2.2	440,012	3.4
Apache	101,735	.9	116,387	.9
Santa Cruz	68,279	.6	33,352	.3
Navajo	30,593	.3	18,288	.1
Cochise	18,949	.2	50,089	.4
Pinal	3,140	*	34,069	.3
Pima	2,027	*	4,275	*
Graham	0	0	57,098	.4
Yavapai	0	0	9,320	.1
Greenlee	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
TOTAL	11,206,334	100.0%	12,773,848	100.0%

*Indicates % less than .1

TABLE 30: BOAT USE DAYS BY COUNTY AND STATE (12 MONTH DATA)

COUNTY	TOTAL	STATE OF REGISTRATION		
		Arizona	California	Nevada
Mohave	1,010,198	226,894	672,434	110,870
Maricopa	334,043	304,226	29,522	295
La Paz	299,971	89,441	208,806	1,723
Coconino	196,329	100,906	92,376	3,047
Yuma	74,294	8,873	65,421	0
Gila	69,841	67,432	2,410	0
Apache	31,209	16,233	14,976	0
Santa Cruz	18,224	18,224	0	0
Cochise	5,830	5,830	0	0
Navajo	4,192	2,763	1,430	0
Pinal	1,469	800	669	0
Pima	881	881	0	0
Yavapai	0	0	0	0
Graham	0	0	0	0
Greenlee	0	0	0	0
TOTAL - 2003	2,046,481	842,502	1,088,044	115,935
TOTAL - 2000 ¹	2,441,731	1,094,202	861,200	423,311

¹Includes 63,017 Utah Days

TABLE 31: PERSON USE DAYS BY COUNTY AND STATE (12 MONTH DATA)

COUNTY	TOTAL	STATE OF REGISTRATION		
		Arizona	California	Nevada
Mohave	5,850,043	1,140,636	4,280,242	429,164
La Paz	1,717,705	494,222	1,215,282	8,201
Maricopa	1,354,593	1,209,422	143,705	1,466
Coconino	1,405,410	571,401	806,823	27,186
Yuma	411,738	40,933	370,806	0
Gila	242,120	227,803	14,317	0
Apache	101,735	50,336	51,399	0
Santa Cruz	68,279	68,279	0	0
Navajo	30,593	9,146	21,447	0
Cochise	18,949	18,949	0	0
Pinal	3,140	1,803	1,338	0
Pima	2,027	2,027	0	0
Yavapai	0	0	0	0
Graham	0	0	0	0
Greenlee	0	0	0	0
TOTAL - 2003	11,206,334	3,834,958	6,905,359	466,017
TOTAL - 2000 ¹	12,773,848	4,887,729	5,588,040	1,819,372

¹Includes 478,708 Utah Days

TABLE 32: WATERCRAFT USE BY SPECIFIC LAKES/RIVERS (12 MONTH DATA)

LAKE	BOAT USE DAYS	PERSON USE DAYS
Lake Havasu	568,493	3,128,661
Lake Mohave	239,190	1,576,264
Lake Mead	222,779	1,235,222
Parker Strip	217,910	1,323,033
Lake Powell	175,696	1,321,309
Pleasant	174,506	702,107
Apache	54,830	253,387
Roosevelt	52,092	196,162
Martinez	51,232	272,231
Saguaro	34,645	141,039
Bartlett	34,599	118,679
Canyon	29,471	115,781
Davis Dam to Topock		
Gorge	22,365	126,200
San Carlos	17,750	45,958
Patagonia	17,230	66,787
Big	14,478	51,075
Alamo	14,035	53,690
Squaw	13,579	103,928
Head Rock Dam to		
Ehrenberg	10,822	27,761
Topock Gorge	10,508	62,789
Mittry	9,483	35,579
Lees Ferry	8,113	44,662
Hawley	6,466	27,102
Parker Canyon	5,830	18,949
Willow Springs	4,740	12,471
Bunch	4,253	8,505
Grand Canyon	3,711	33,772
Woods Canyon	2,999	9,685
Horseshoe	2,781	14,735
Salt River	2,290	6,508
Show Low	2,150	3,910
Concho	1,591	3,183
Picacho Reservoir	1,469	3,140
Mormon	1,430	8,579
Black Canyon	1,430	21,447
Reservation	1,402	3,130
Blue Ridge	1,325	3,937
Sunrise	1,030	2,575
Pena Blanca	995	1,492
Lyman	860	3,239
Verde River	812	2,031
Long	745	1,896
Arivaca	678	1,215
Ashurst	596	1,590

(CONTINUED)

(CONT'D) TABLE 32: WATERCRAFT USE BY SPECIFIC
LAKES/RIVERS (12 MONTH DATA)

<u>LAKE</u>	<u>BOAT USE DAYS</u>	<u>PERSON USE DAYS</u>
Rainbow	508	5,077
Luna	488	1,463
Watson	354	354
Knoll	271	542
Nelson Reservoir	271	542
Crescent	262	705
Bear Canyon	251	414
Silverbell	203	812
Upper Lake Mary	163	325
Becker	108	217
Tempe Town	108	325
Clear Creek	54	108
Cholla	51	51
TOTAL	2,046,481	11,206,334

TABLE 33: WATERCRAFT USAGE: ARIZONA REGISTERED BOATS (12 MONTH DATA)

COUNTY:	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
APACHE												
Lake	1	2	3	4	5	6	7	8	9			
Becker	108	0	0	0	0	0	0	0	0	108	2.00	217
Big	3902	51	1044	3046	0	0	0	0	0	8044	3.15	25339
Bunch	0	0	0	0	0	0	0	0	0	0	0.00	0
Concho	0	0	1591	0	0	0	0	0	0	1591	2.00	3183
Crescent	163	0	99	0	0	0	0	0	0	262	2.69	705
Drift Fence	0	0	0	0	0	0	0	0	0	0	0.00	0
Hawley	1030	0	995	152	0	0	0	0	0	2177	4.57	9944
Luna	488	0	0	0	0	0	0	0	0	488	3.00	1463
Lyman	0	760	99	0	0	0	0	0	0	860	3.77	3239
Mexican Hay	0	0	0	0	0	0	0	0	0	0	0.00	0
Nelson Reservoir	271	0	0	0	0	0	0	0	0	271	2.00	542
Reservation	1301	0	0	102	0	0	0	0	0	1402	2.23	3130
Sunrise	1030	0	0	0	0	0	0	0	0	1030	2.50	2575
TOTAL	8293	811	3829	3300	0	0	0	0	0	16233		50336

COUNTY:	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
COCHISE												
Lake	1	2	3	4	5	6	7	8	9			
Parker Canyon	4336	0	696	355	0	443	0	0	0	5830	3.25	18949
TOTAL	4336	0	696	355	0	443	0	0	0	5830		18949

COUNTY:	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
COCONINO												
Lake	1	2	3	4	5	6	7	8	9			
Ashurst	596	0	0	0	0	0	0	0	0	596	2.67	1590
Bear Canyon	163	0	0	0	0	89	0	0	0	251	1.65	414
Blue Ridge	1030	0	0	0	0	295	0	0	0	1325	2.97	3937
Cataract	0	0	0	0	0	0	0	0	0	0	0.00	0
Dogtown	0	0	0	0	0	0	0	0	0	0	0.00	0
Kaibab	0	0	0	0	0	0	0	0	0	0	0.00	0
Knoll	271	0	0	0	0	0	0	0	0	271	2.00	542
Lake Powell	3360	25386	348	9139	37365	0	1775	11166	0	88538	6.08	538472
Lees Ferry	163	0	0	1726	103	0	0	0	0	1992	2.47	4929
Long	542	0	0	203	0	0	0	0	0	745	2.55	1896
Mormon	0	0	0	0	0	0	0	0	0	0	0.00	0
Upper Lake Mary	163	0	0	0	0	0	0	0	0	163	2.00	325
Whitehorse	0	0	0	0	0	0	0	0	0	0	0.00	0
Willow Springs	3198	0	448	203	0	177	0	0	0	4025	2.39	9611
Woods Canyon	2602	0	398	0	0	0	0	0	0	2999	3.23	9685
TOTAL	12087	25386	1194	11271	37468	561	1775	11166	0	100906		571401

TABLE 33: WATERCRAFT USAGE: ARIZONA REGISTERED BOATS (12 MONTH DATA)

COUNTY: GILA	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Roosevelt	12087	8209	99	22288	7597	177	142	76	0	50674	3.65	184822
San Carlos	7588	0	1392	6854	620	0	0	303	0	16757	2.56	42981
TOTAL	19675	8209	1492	29142	8217	177	142	379	0	67432		227803

COUNTY: GRAHAM	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Roper	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0		0

COUNTY: LA PAZ	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Alamo	2710	304	0	7463	1240	0	0	0	0	11718	3.21	37616
Ehrenberg	0	0	0	0	0	0	0	0	0	0	0.00	0
Ehrenberg to north end of	0	0	0	0	0	354	0	0	0	354	1.00	354
Lake Havasu	168	4358	30	1848	6574	59	859	1344	6	15245	4.69	71495
Parker Strip	0	16620	199	17566	20775	0	0	6964	0	62125	6.19	384757
TOTAL	2878	21281	229	26878	28589	413	859	8308	6	89441		494222

COUNTY: MARICOPA	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Apache	6721	11451	497	15739	11886	89	0	0	0	46383	4.56	211548
Bartlett	9919	5320	597	12693	5995	0	0	76	0	34599	3.43	118679
Canyon	1626	7905	398	7717	8527	0	1065	2233	0	29471	3.93	115781
Horseshoe	434	0	0	203	0	0	0	0	0	637	2.93	1867
Pleasant	21246	30757	3929	49247	40776	3274	0	5980	1073	156282	3.94	615647
Saguaro	1192	7347	0	11576	10904	89	0	2536	0	33644	4.07	137036
Salt River	976	507	497	0	310	0	0	0	0	2290	2.84	6508
Tempe Town	108	0	0	0	0	0	0	0	0	108	3.00	325
Verde River	0	0	0	812	0	0	0	0	0	812	2.50	2031
TOTAL	42222	63287	5918	97986	78399	3451	1065	10825	1073	304226		1209422

TABLE 33: WATERCRAFT USAGE: ARIZONA REGISTERED BOATS (12 MONTH DATA)

COUNTY: MOHAVE	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Davis Dam/Topock	0	2534	0	102	1705	0	0	0	0	4340	4.94	21424
Grand Canyon	54	507	0	0	1034	0	0	0	0	1595	10.75	17148
Lake Havasu	1512	39219	269	16632	59163	531	7732	12093	52	137203	4.69	643453
Lake Mead	1084	22295	0	5432	15091	0	0	379	0	44280	5.59	247466
Lake Mohave	542	9881	0	1625	23204	0	746	379	0	36376	5.51	200293
Topock Gorge	0	0	0	0	3101	0	0	0	0	3101	3.50	10853
TOTAL	3192	74434	269	23791	103298	531	8477	12850	52	226894		1140636

COUNTY: NAVAJO	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Black Canyon	0	0	0	0	0	0	0	0	0	0	0.00	0
Cholla	0	51	0	0	0	0	0	0	0	51	1.00	51
Clear Creek	54	0	0	0	0	0	0	0	0	54	2.00	108
Cooley	0	0	0	0	0	0	0	0	0	0	0.00	0
Fools Hollow	0	0	0	0	0	0	0	0	0	0	0.00	0
Rainbow	0	0	0	508	0	0	0	0	0	508	10.00	5077
Show Low	1951	0	199	0	0	0	0	0	0	2150	1.82	3910
White Mtn	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	2005	51	199	508	0	0	0	0	0	2763		9146

COUNTY: PIMA	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Arivaca	488	0	50	0	52	89	0	0	0	678	1.79	1,215
Silverbell	0	0	0	203	0	0	0	0	0	203	4.00	812
TOTAL	488	0	50	203	52	89	0	0	0	881		2,027

COUNTY: PINAL	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Picacho Reservoir	0	0	597	203	0	0	0	0	0	800	2.25	1803
TOTAL	0	0	597	203	0	0	0	0	0	800		1803

TABLE 33: WATERCRAFT USAGE: ARIZONA REGISTERED BOATS (12 MONTH DATA)

COUNTY: SANTA CRUZ	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Patagonia	4173	3040	2685	5483	1654	118	0	76	0	17230	3.88	66787
Pena Blanca	0	0	995	0	0	0	0	0	0	995	1.50	1492
TOTAL	4173	3040	3680	5483	1654	118	0	76	0	18224		68279

COUNTY: YAVAPAI	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Goldwater	0	0	0	0	0	0	0	0	0	0	0.00	0
Lynx	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0		0

COUNTY: YUMA	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Martinez Lake	0	0	0	3452	4134	0	0	0	0	7587	4.78	36280
Mittry	217	0	0	812	207	0	0	0	0	1236	3.60	4450
Squaw Lake	0	51	0	0	0	0	0	0	0	51	4.00	203
TOTAL	217	51	0	4265	4341	0	0	0	0	8873		40933

TABLE 34: WATERCRAFT USAGE: CALIFORNIA REGISTERED BOATS (12 MONTH DATA)

COUNTY:	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
APACHE												
Lake	1	2	3	4	5	6	7	8	9			
Becker	0	0	0	0	0	0	0	0	0	0	0.00	0
Big	0	6434	0	0	0	0	0	0	0	6434	4.00	25736
Bunch	0	0	0	0	4253	0	0	0	0	4253	2.00	8505
Concho	0	0	0	0	0	0	0	0	0	0	0.00	0
Crescent	0	0	0	0	0	0	0	0	0	0	0.00	0
Drift Fence	0	0	0	0	0	0	0	0	0	0	0.00	0
Hawley	0	4289	0	0	0	0	0	0	0	4289	4.00	17158
Luna	0	0	0	0	0	0	0	0	0	0	0.00	0
Lyman	0	0	0	0	0	0	0	0	0	0	0.00	0
Mexican Hay	0	0	0	0	0	0	0	0	0	0	0.00	0
Nelson Reservoir	0	0	0	0	0	0	0	0	0	0	0.00	0
Reservation	0	0	0	0	0	0	0	0	0	0	0.00	0
Sunrise	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	10724	0	0	4253	0	0	0	0	14976		51399

COUNTY:	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
COCHISE												
Lake	1	2	3	4	5	6	7	8	9			
Parker Canyon	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0		0

COUNTY:	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
COCONINO												
Lake	1	2	3	4	5		7	8	9			
Ashurst	0	0	0	0	0	0	0	0	0	0	0.00	0
Bear Canyon	0	0	0	0	0	0	0	0	0	0	0.00	0
Blue Ridge	0	0	0	0	0	0	0	0	0	0	0.00	0
Cataract	0	0	0	0	0	0	0	0	0	0	0.00	0
Dogtown	0	0	0	0	0	0	0	0	0	0	0.00	0
Kaibab	0	0	0	0	0	0	0	0	0	0	0.00	0
Knoll	0	0	0	0	0	0	0	0	0	0	0.00	0
Lake Powell	3845	39605	403	6363	31894	0	1426	573	0	84110	8.98	755651
Lees Ferry	1170	1001	0	406	3544	0	0	0	0	6121	6.49	39733
Long	0	0	0	0	0	0	0	0	0	0	0.00	0
Mormon	0	1430	0	0	0	0	0	0	0	1430	6.00	8579
Upper Lake Mary	0	0	0	0	0	0	0	0	0	0	0.00	0
Whitehorse	0	0	0	0	0	0	0	0	0	0	0.00	0
Willow Springs	0	715	0	0	0	0	0	0	0	715	4.00	2860
Woods Canyon	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	5,016	42,751	403	6,770	35,437	0	1,426	573	0	92,376		806,823

TABLE 34: WATERCRAFT USAGE: CALIFORNIA REGISTERED BOATS (12 MONTH DATA)

COUNTY: GILA	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Roosevelt	0	0	0	0	1418	0	0	0	0	1418	8.00	11340
San Carlos	0	0	0	0	992	0	0	0	0	992	3.00	2977
TOTAL	0	0	0	0	2410	0	0	0	0	2410		14317

COUNTY: GRAHAM	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Roper	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0		0

COUNTY: LA PAZ	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Alamo	0	1430	0	812	0	0	0	0	0	2242	7.10	15923
Ehrenberg	334	2288	0	6499	1701	0	0	0	0	10822	2.57	27761
Ehrenberg to north end of	0	0	0	0	0	0	0	0	0	0	0.00	0
Lake Havasu	1505	21518	0	3033	13636	25	261	1121	0	41100	5.81	238829
Parker Strip	4681	79497	504	13674	53582	1395	0	1309	0	154643	6.03	932769
TOTAL	6520	104733	504	24018	68919	1420	261	2431	0	208806		1215282

COUNTY: MARICOPA	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Apache	0	5862	0	271	2126	0	0	0	0	8259	4.97	41013
Bartlett	0	0	0	0	0	0	0	0	0	0	0.00	0
Canyon	0	0	0	0	0	0	0	0	0	0	0.00	0
Horseshoe	0	2145	0	0	0	0	0	0	0	2145	6.00	12868
Pleasant	2675	7578	0	3520	3260	985	0	0	99	18118	4.74	85820
Saguaro	0	1001	0	0	0	0	0	0	0	1001	4.00	4003
Salt River	0	0	0	0	0	0	0	0	0	0	0.00	0
Tempe Town	0	0	0	0	0	0	0	0	0	0	0.00	0
Verde River	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	2675	16586	0	3791	5387	985	0	0	99	29522		143705

TABLE 34: WATERCRAFT USAGE: CALIFORNIA REGISTERED BOATS (12 MONTH DATA)

COUNTY: MOHAVE	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Davis Dam/Topock	0	13726	0	2031	2268	0	0	0	0	18025	5.81	104776
Grand Canyon	0	0	0	0	1134	0	0	982	0	2116	7.86	16625
Lake Havasu	13542	193666	0	27295	122727	222	2353	10091	0	369896	5.81	2149465
Lake Mead	2842	58479	0	7717	18144	575	0	0	0	87757	7.39	648822
Lake Mohave	6520	116958	504	7176	52731	1149	475	1719	0	187232	6.99	1308617
Topock Gorge	0	5004	0	135	2268	0	0	0	0	7408	7.01	51937
TOTAL	22905	387833	504	44354	199272	1945	2829	12792	0	672434		4280242

COUNTY: NAVAJO	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Black Canyon	0	1,430	0	0	0	0	0	0	0	1,430	15.00	21,447
Cholla	0	0	0	0	0	0	0	0	0	0	0.00	0
Clear Creek	0	0	0	0	0	0	0	0	0	0	0.00	0
Cooley	0	0	0	0	0	0	0	0	0	0	0.00	0
Fools Hollow	0	0	0	0	0	0	0	0	0	0	0.00	0
Rainbow	0	0	0	0	0	0	0	0	0	0	0.00	0
Show Low	0	0	0	0	0	0	0	0	0	0	0.00	0
White Mtn	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	1,430	0	0	0	0	0	0	0	1,430		21,447

COUNTY: PIMA	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Arivaca	0	0	0	0	0	0	0	0	0	0	0.00	0
Silverbell	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0		0

COUNTY: PINAL	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Picacho Reservoir	669	0	0	0	0	0	0	0	0	669	2.00	1338
TOTAL	669	0	0	0	0	0	0	0	0	669		1338

TABLE 34: WATERCRAFT USAGE: CALIFORNIA REGISTERED BOATS (12 MONTH DATA)

COUNTY: SANTA CRUZ	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Patagonia	0	0	0	0	0	0	0	0	0	0	0.00	0
Pena Blanca	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0		0

COUNTY: YAVAPAI	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Goldwater	0	0	0	0	0	0	0	0	0	0	0.00	0
Lynx	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0		0

COUNTY: YUMA	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Martinez Lake	8360	10581	0	14216	10490	0	0	0	0	43645	5.41	235951
Mittry	669	7578	0	0	0	0	0	0	0	8247	3.77	31130
Squaw Lake	7524	6005	0	0	0	0	0	0	0	13529	7.67	103726
TOTAL	16552	24164	0	14216	10490	0	0	0	0	65421		370806

TABLE 35: WATERCRAFT USAGE: NEVADA REGISTERED BOATS (12 MONTH DATA)

COUNTY: APACHE	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Becker	0	0	0	0	0	0	0	0	0	0	0.00	0
Big	0	0	0	0	0	0	0	0	0	0	0.00	0
Bunch	0	0	0	0	0	0	0	0	0	0	0.00	0
Concho	0	0	0	0	0	0	0	0	0	0	0.00	0
Crescent	0	0	0	0	0	0	0	0	0	0	0.00	0
Drift Fence	0	0	0	0	0	0	0	0	0	0	0.00	0
Hawley	0	0	0	0	0	0	0	0	0	0	0.00	0
Luna	0	0	0	0	0	0	0	0	0	0	0.00	0
Lyman	0	0	0	0	0	0	0	0	0	0	0.00	0
Mexican Hay	0	0	0	0	0	0	0	0	0	0	0.00	0
Nelson Reservoir	0	0	0	0	0	0	0	0	0	0	0.00	0
Reservation	0	0	0	0	0	0	0	0	0	0	0.00	0
Sunrise	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0		0

COUNTY: COCHISE	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Parker Canyon	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0		0

TABLE 35: WATERCRAFT USAGE: NEVADA REGISTERED BOATS (12 MONTH DATA)

COUNTY: COCONINO	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Ashurst	0	0	0	0	0	0	0	0	0	0	0.00	0
Bear Canyon	0	0	0	0	0	0	0	0	0	0	0.00	0
Blue Ridge	0	0	0	0	0	0	0	0	0	0	0.00	0
Cataract	0	0	0	0	0	0	0	0	0	0	0.00	0
Dogtown	0	0	0	0	0	0	0	0	0	0	0.00	0
Kaibab	0	0	0	0	0	0	0	0	0	0	0.00	0
Knoll	0	0	0	0	0	0	0	0	0	0	0.00	0
Lake Powell	0	1209	0	910	594	0	334	0	0	3047	8.92	27186
Lees Ferry	0	0	0	0	0	0	0	0	0	0	0.00	0
Long	0	0	0	0	0	0	0	0	0	0	0.00	0
Mormon	0	0	0	0	0	0	0	0	0	0	0.00	0
Upper Lake Mary	0	0	0	0	0	0	0	0	0	0	0.00	0
Whitehorse	0	0	0	0	0	0	0	0	0	0	0.00	0
Willow Springs	0	0	0	0	0	0	0	0	0	0	0.00	0
Woods Canyon	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	1209	0	910	594	0	334	0	0	3047		27186

COUNTY: GILA	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Roosevelt	0	0	0	0	0	0	0	0	0	0	0.00	0
San Carlos	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0		0

COUNTY: GRAHAM	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Roper	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0		0

TABLE 35: WATERCRAFT USAGE: NEVADA REGISTERED BOATS (12 MONTH DATA)

COUNTY:	LA PAZ	BOAT CLASS								BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Alamo	0	0	0	76	0	0	0	0	0	76	2.00	152
Ehrenberg	0	0	0	0	0	0	0	0	0	0	0.00	0
Ehrenberg to north end of Martinez	0	0	0	0	0	0	0	0	0	0	0.00	0
Lake Havasu	0	284	0	27	193	0	0	0	1	505	5.03	2542
Parker Strip	0	1031	0	0	111	0	0	0	0	1143	4.82	5507
TOTAL	0	1316	0	102	305	0	0	0	1	1723		8201

COUNTY:	MARICOPA									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Apache	0	0	0	114	74	0	0	0	0	188	4.40	826
Bartlett	0	0	0	0	0	0	0	0	0	0	0.00	0
Canyon	0	0	0	0	0	0	0	0	0	0	0.00	0
Horseshoe	0	0	0	0	0	0	0	0	0	0	0.00	0
Pleasant	0	107	0	0	0	0	0	0	0	107	6.00	640
Saguaro	0	0	0	0	0	0	0	0	0	0	0.00	0
Salt River	0	0	0	0	0	0	0	0	0	0	0.00	0
Tempe Town	0	0	0	0	0	0	0	0	0	0	0.00	0
Verde River	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	107	0	114	74	0	0	0	0	295		1466

COUNTY:	MOHAVE									BOAT CLASS	BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9				
Davis Dam/Topock	0	0	0	0	0	0	0	0	0	0	0.00	0	
Grand Canyon	0	0	0	0	0	0	0	0	0	0	0.00	0	
Lake Havasu	0	2560	0	239	1739	0	0	0	7	4545	5.03	22876	
Lake Mead	6182	37622	0	15653	21398	2293	268	6848	478	90742	3.74	338934	
Lake Mohave	148	4125	0	3487	7764	50	8	0	0	15583	4.32	67354	
Topock Gorge	0	0	0	0	0	0	0	0	0	0	0.00	0	
TOTAL	6330	44308	0	19378	30901	2344	276	6848	484	110870		429164	

TABLE 35: WATERCRAFT USAGE: NEVADA REGISTERED BOATS (12 MONTH DATA)

COUNTY: NAVAJO	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Black Canyon	0	0	0	0	0	0	0	0	0	0	0.00	0
Cholla	0	0	0	0	0	0	0	0	0	0	0.00	0
Clear Creek	0	0	0	0	0	0	0	0	0	0	0.00	0
Cooley	0	0	0	0	0	0	0	0	0	0	0.00	0
Fools Hollow	0	0	0	0	0	0	0	0	0	0	0.00	0
Rainbow	0	0	0	0	0	0	0	0	0	0	0.00	0
Show Low	0	0	0	0	0	0	0	0	0	0	0.00	0
White Mtn	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0		0

COUNTY: PIMA	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Arivaca	0	0	0	0	0	0	0	0	0	0	0.00	0
Silverbell	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0		0

COUNTY: PINAL	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Picacho Reservoir	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0		0

COUNTY: SANTA CRUZ	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Patagonia	0	0	0	0	0	0	0	0	0	0	0.00	0
Pena Blanca	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0		0

TABLE 35: WATERCRAFT USAGE: NEVADA REGISTERED BOATS (12 MONTH DATA)

COUNTY: YAVAPAI	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Goldwater	0	0	0	0	0	0	0	0	0	0	0.00	0
Lynx	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0		0

COUNTY: YUMA	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Martinez Lake	0	0	0	0	0	0	0	0	0	0	0.00	0
Mittry	0	0	0	0	0	0	0	0	0	0	0.00	0
Squaw Lake	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0		0

6.3 Combined Data Set

The next series of tables (Table 36 to Table 37) present the boat and person use data based on the combined two-week data and 12-month data sets. In addition, the following two tables also include estimates of boat and person use days for Utah boat owners. The Utah figures utilized were Utah's 2000 use figures reduced by 35 percent, the 2000 to 2003 reduction recorded in Arizona, California and Nevada.

TABLE 36: BOAT USE DAYS AND
PERSON USE DAYS BY COUNTY
(COMBINED 2 WEEK/12 MONTH DATA)

	<u>BOAT USE DAYS</u>		<u>PERSON USE DAYS</u>	
	<u>Total</u>	<u>%</u>	<u>Total</u>	<u>%</u>
Mohave	2,331,824	43.2%	12,295,541	45.7%
Maricopa	984,710	18.2	3,833,078	14.3
La Paz	742,576	13.8	3,957,502	14.7
Coconino	632,790	11.7	3,764,120	14.0
Yuma	293,867	5.4	1,501,165	5.6
Gila	231,481	4.3	916,240	3.4
Santa Cruz	67,105	1.2	247,814	.9
Apache	66,557	1.2	213,655	.8
Cochise	28,828	.5	73,052	.3
Navajo	9,396	.2	49,671	.2
Yavapai	3,721	*	3,721	*
Graham	2,602	*	5,203	*
Pinal	1,469	*	3,140	*
Pima	881	*	2,027	*
Greenlee	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
TOTAL	5,397,807	100.0%	26,865,929	100.0%

*Indicates % less than .1

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TABLE 37: WATERCRAFT USE BY  
SPECIFIC LAKES/RIVERS  
(COMBINED 2 WEEK/12 MONTH DATA)

| LAKE                | BOAT<br>USE DAYS | PERSON<br>USE DAYS |
|---------------------|------------------|--------------------|
| Lake Havasu         | 1,250,175        | 6,401,217          |
| Lake Mohave         | 650,736          | 3,736,527          |
| Lake Powell         | 583,510          | 3,535,520          |
| Parker Strip        | 524,533          | 3,000,050          |
| Lake Mead           | 491,872          | 2,483,865          |
| Pleasant            | 409,521          | 1,514,538          |
| Martinez            | 233,640          | 1,209,961          |
| Roosevelt           | 202,436          | 847,691            |
| Apache              | 193,922          | 798,504            |
| Saguaro             | 177,098          | 697,210            |
| Bartlett            | 113,418          | 428,971            |
| Canyon              | 79,941           | 361,833            |
| Alamo               | 68,483           | 235,471            |
| Patagonia           | 63,509           | 241,119            |
| Davis Dam to Topock |                  |                    |
| Gorge               | 38,256           | 186,499            |
| Mittry              | 36,241           | 156,056            |
| San Carlos          | 29,045           | 68,549             |
| Parker Canyon       | 28,828           | 73,052             |
| Hawley              | 24,569           | 80,016             |
| Head Rock Dam to    |                  |                    |
| Ehrenberg           | 24,430           | 82,193             |
| Squaw               | 23,986           | 135,148            |
| Willow Springs      | 20,610           | 78,346             |
| Topock Gorge        | 20,353           | 86,117             |
| Lees Ferry          | 17,157           | 116,952            |
| Big                 | 16,865           | 55,849             |
| Reservation         | 13,659           | 44,353             |
| Show Low            | 7,353            | 22,988             |
| Woods Canyon        | 6,732            | 16,020             |
| Grand Canyon        | 5,209            | 40,748             |
| Horseshoe           | 5,168            | 19,509             |
| Bunch               | 4,253            | 8,505              |
| Lynx                | 3,721            | 3,721              |
| Sunrise             | 3,631            | 15,583             |
| Pena Blanca         | 3,596            | 6,695              |
| Roper               | 2,602            | 5,203              |
| Salt River          | 2,290            | 6,508              |
| Verde River         | 2,028            | 4,463              |
| Concho              | 1,591            | 3,183              |
| Picacho Reservoir   | 1,469            | 3,140              |
| Mormon              | 1,430            | 8,579              |

(CONTINUED)

(CONT.) TABLE 37: WATERCRAFT USE BY  
SPECIFIC LAKES/RIVERS  
(COMBINED 2 WEEK/12 MONTH DATA)

| LAKE                                  | BOAT<br>USE DAYS | PERSON<br>USE DAYS |
|---------------------------------------|------------------|--------------------|
| Black Canyon                          | 1,430            | 21,447             |
| Blue Ridge                            | 1,325            | 3,937              |
| Tempe Town                            | 1,324            | 1,541              |
| Lyman                                 | 860              | 3,239              |
| Long                                  | 745              | 1,896              |
| Arivaca                               | 678              | 1,215              |
| Ashurst                               | 596              | 1,590              |
| Rainbow                               | 508              | 5,077              |
| Luna                                  | 488              | 1,463              |
| Ehrenberg to north<br>end of Martinez | 354              | 354                |
| Knoll                                 | 271              | 542                |
| Nelson Reservoir                      | 271              | 542                |
| Crescent                              | 262              | 705                |
| Bear Canyon                           | 251              | 414                |
| Silverbell                            | 203              | 812                |
| Upper Lake Mary                       | 163              | 325                |
| Becker                                | 108              | 217                |
| Clear Creek                           | 54               | 108                |
| Cholla                                | 51               | 51                 |
| TOTAL                                 | 5,397,807        | 26,865,929         |

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7.0 LAUNCH RAMP SURVEY DATA

This section of the report presents the findings of the launch ramp surveys which were conducted at ten Arizona lakes and rivers throughout the study period.

As may be seen on Table 38, for eight of the ten lakes surveyed, the launch ramp survey findings closely parallel the findings generated in the boat owner survey. For the following two lakes, however, the findings are quite different between the two surveys:

LAKE MEAD -- At Lake Mead the "other" state readings are very different with figures of 17 percent from the launch ramp survey and 53 percent from the boat owner survey. The main reason for this difference is that the launch ramp survey at Lake Mead was conducted at Temple Bar in Arizona and the vast majority of Nevada residents who utilize the lake launch at one of three Nevada-based sites. Thus, while Nevada residents make heavy use of Lake Mead, they do not show up in the launch ramp counts.

LAKE POWELL – At Lake Powell the launch ramp survey generated an "other" state figure of 41 percent (85% of which were Utah boaters) while the boat owner survey generated a figure of only four percent. The reason for this variation is significant use of Lake Powell by Utah residents which are not included in the boat owner survey.

TABLE 38: LAKE USE BY STATE OF
RESIDENCE -- LAUNCH RAMP SURVEY

LAKE/RIVER	STUDY	2003			2000		
		ARIZONA	CALIFORNIA	³ OTHER	ARIZONA	CALIFORNIA	⁴ OTHER
Bartlett	¹ Ramp ² Survey	99% 100	*% 0	*% 0	99% 100	1% 0	*% 0
Havas	Ramp Survey	35 27	63 71	3 2	45 38	51 59	4 3
Martinez	Ramp Survey	29 17	71 76	* 7	31 21	68 79	1 0
Mead	Ramp Survey	27 15	56 32	17 53	21 15	65 23	14 62
Mohave	Ramp Survey	14 14	70 78	16 8	22 20	73 57	5 23
Parker Strip	Ramp Survey	22 12	78 85	0 3	23 18	77 80	0 2
Pleasant	Ramp Survey	98 94	1 6	1 0	95 100	2 0	3 0
Powell	Ramp Survey	33 48	26 48	41 4	35 42	25 19	40 39
Roosevelt	Ramp Survey	97 99	3 1	0 0	91 99	0 1	1 0
Saguaro	Ramp Survey	98 100	1 0	1 0	96 100	2 0	2 0

¹Boat distribution from launch ramp survey

²Boat use days from boat owner survey

³ Other from boat survey only includes Nevada while other from launch ramp survey may include any state observed.

⁴ Other from boat survey only includes Nevada and Utah while other from launch ramp survey may include any state observed.

Indicates % less than .5

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## 8.0 ADDITIONAL BOATING DATA

This final section of the report presents a variety of attitudinal and behavioral data regarding boat usage. When reading this section, keep in mind that all of the data presented has been computer weighted so that each state and boat classification properly represents its proportional contribution to overall boat registrations in the three-state sample universe.

### 8.1 Trip Expenditures

The average expenditure for a boating trip in Arizona is \$232. The typical Arizona boater spends \$151 per trip compared to \$381 for California boaters and \$75 for Nevada boaters.

TABLE 39: TRIP EXPENDITURES

"On your last boating trip in Arizona during the (FIRST/LAST) two weeks of (MONTH), how much money did you and the other members of your boating party spend on the following items?"

|                                                                                           | % SPENDING<br>MONEY<br>ON ITEM | MEDIAN DAILY<br>EXPENDITURE<br>(AMONG THOSE<br>SPENDING ON ITEM) |
|-------------------------------------------------------------------------------------------|--------------------------------|------------------------------------------------------------------|
| For food and beverages purchased<br>at retail stores                                      | 79%                            | \$71                                                             |
| For equipment rental, tackle, bait and<br>gasoline                                        | 78                             | 66                                                               |
| For entry fees or permits                                                                 | 59                             | 26                                                               |
| At restaurants                                                                            | 55                             | 120                                                              |
| For gifts, souvenirs, clothing and<br>other personal items                                | 31                             | 65                                                               |
| For overnight lodging at hotels and<br>motels                                             | 30                             | 215                                                              |
| For any other items directly related<br>to your boating trip which I haven't<br>mentioned | 29                             | 108                                                              |
| <b>TOTAL SPENDING<sup>1</sup></b>                                                         | <b>99%</b>                     | <b>\$212</b>                                                     |
| Arizona                                                                                   | 99                             | 151                                                              |
| California                                                                                | 99                             | 381                                                              |
| Nevada                                                                                    | 98                             | 75                                                               |

<sup>1</sup>Note: Total is an independent, combined expenditure figure, not a total for the 7 selected items.

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8.2 Boating And Water-based Recreational Facilities Most Needed

Boat owners were asked to indicate the most needed facilities and the most needed services at their favorite lake. Response to these two questions was very similar so they were combined on the following table for analysis. As may be seen, launch ramps (22%) and public restrooms (21%) continue to receive the greatest mention from boaters. Also receiving sizeable response are increased law enforcement (10%), marinas (10%), gas stations (9%), concessions that sell food, drinks, tackle and the like (9%) and campgrounds (8%). One out of three boaters (33%) indicate there are no additional facilities or services needed at their favorite lake.

**TABLE 40: BOATING AND WATER-BASED
RECREATIONAL FACILITIES/SERVICES NEEDED**

"What would you say are the two or three most needed facilities at (LAKE/RIVER)?"

"And what would you say are the two or three most needed services at (LAKE/RIVER)?"

	<u>TOTAL</u>				<u>STATE OF REGISTRATION</u>		
	2003	2000	1997	1994	AZ	CA	NV
None	33%	36%	35%	31%	32%	36%	21%
Launching ramps	22	20	20	19	21	22	35
Public restrooms	21	22	19	10	23	20	20
More law enforcement	10	11	12	7	10	10	14
Marinas	10	10	9	5	8	10	13
Gas stations	9	9	14	0	6	11	8
Concessions	9	7	12	0	9	10	10
Campgrounds	8	9	11	10	8	8	4
Restaurants/bars	7	6	6	1	6	8	10
Courtesy docks	6	6	6	5	6	6	6
Parking facilities	6	6	5	5	8	5	3
Boat gas dock	5	6	6	4	3	7	4
Hotel/motel	4	3	4	2	2	6	3
Beaches	4	3	3	3	3	4	3
Improved access roads	3	2	3	4	3	2	3
Sanitary dump stations	2	3	0	0	3	1	*
RV park/hookups	2	2	3	1	2	2	2
Less litter/cleaner	2	2	3	3	2	1	5
Jet ski area	2	2	2	2	3	2	6
Picnic areas and facilities	1	2	3	2	1	1	1
Showers	1	2	2	2	2	1	*
Ramadas/shaded areas	1	2	1	0	2	1	2

(CONTINUED)

(CONT.) TABLE 40: BOATING AND WATER-BASED
RECREATIONAL FACILITIES/SERVICES NEEDED

	<u>TOTAL</u>				<u>STATE OF REGISTRATION</u>		
	<u>2003</u>	<u>2000</u>	<u>1997</u>	<u>1994</u>	<u>AZ</u>	<u>CA</u>	<u>NV</u>
Trash dumpsters	2%	1%	4%	2%	2%	1%	3%
Drinking water outlets	1	1	1	1	1	1	1
Emergency phones	1	1	1	0	1	1	*
Stock fish	1	1	1	2	1	1	2
Campsites for boats only	1	1	0	0	1	1	0
Fish cleaning station	1	1	1	0	1	*	1
All others	7	8	3	9	8	6	7

*Indicates response level of less than .5 percent.
Totals exceed 100% due to multiple responses.

Note: 1994 study asked, "What would you say are the two or three most needed facilities, services or improvements at (lake/river)?"

8.3 Evaluation Of Water-based Recreation Facilities

Continuing with this line of questioning, boaters were next asked to evaluate each of 22 specific boating and water-based recreational facilities at their favorite lake. As Table 41 reveals, the facility registering the highest net positive reading continues to be paved access roads (+40%). Informational signs receives the next highest net positive reading (+30%), followed by launching ramps (+26%), parking facilities for vehicles (+26%), picnic areas and facilities (+23%), campgrounds (+23%) and parking facilities for boat trailers (+23%). Three items register net negative readings from roughly one-fifth of boaters or more: emergency telephones (-28%), drinking water outlets (-25%) and trash dumpsters accessible by boat (-20%).

Listed below are the items that showed the greatest change – either positive or negative – since the last survey in 2000. Overall, improved readings are recorded on 15 items while lower readings are recorded on four. Three items reveal no change.

MAJOR POSITIVE CHANGES

- ! Parking facilities for vehicles -- 12 point net improvement;
- ! Fishing piers -- seven point net improvement;
- ! Public restrooms – six point net improvement.

MAJOR NEGATIVE CHANGES

- ! Picnic areas accessible by boat only -- eight point net decline.

TABLE 41: EVALUATION OF WATER-BASED RECREATION FACILITIES

"Now I'd like to read you a list of various boating and water-based recreational facilities. As I do, please just tell me if you would rate each as excellent, good, only fair, or poor at (LAKE/RIVER)? If any of the facilities I mention aren't located at (LAKE/RIVER), please just say so."

	Excel- lent	Good	Only Fair	Poor	Not Sure	¹ NET POS/NE			
						2003	2000	1997	1994
Paved access roads	16%	53%	18%	11%	2%	40%	43%	31%	35%
Informational signs	11	52	24	9	4	30	33	26	31
Launching ramps	14	48	23	13	2	26	22	21	36
Parking facilities for vehicles	14	48	26	10	2	26	14	26	19
Picnic areas and facilities	12	45	25	9	9	23	23	19	15
Campgrounds	14	40	21	10	15	23	19	25	22
Parking facilities for boat trailers	14	46	24	13	3	23	18	25	16
Swimming beaches	13	41	21	16	9	17	17	17	7
Concessions that sell food, bait, drinks, tackle, etc.	10	44	26	12	8	16	11	7	14
Campsites accessible by boat only	11	35	18	16	20	12	11	9	16
Boat gas docks	8	42	29	13	8	8	5	7	17
Sanitary dump facilities	9	31	18	16	26	6	2	7	11
Public restrooms	11	39	28	17	5	5	(1)	0	4
Marinas with overnight docking spaces, boat rental, fuel, and boat repair, etc.	8	37	22	19	4	4	7	7	16
Fish cleaning stations	6	26	15	15	38	2	1	6	3
Courtesy docks	9	38	25	21	7	1	(4)	(11)	3
Picnic areas acces- sible by boat only	10	32	22	20	16	0	8	7	2
Fishing piers	3	25	18	21	30	(8)	(15)	(12)	(21)
First-aid stations	5	20	14	21	40	(10)	(13)	(12)	1
Trash dumpsters accessible by boat	8	25	20	33	14	(20)	(24)	(4)	(19)
Drinking water outlets	4	21	19	31	25	(25)	(25)	(27)	(17)
Emergency tele- phones	6	15	19	30	30	(28)	(30)	(12)	(13)

¹ Net Pos/Neg: the difference between scores for excellent/good and only fair/poor.

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The next table reveals boaters' evaluations of recreation facilities by state of registration. As was observed in the past, there is considerable variation in boaters' evaluations from state to state. Of note, however, is the finding that Arizona boaters offer only six net negative evaluations compared to ten in 2000 and 17 in 1997.

**TABLE 42: EVALUATION OF WATER-BASED RECREATION  
FACILITIES BY STATE**

|                                             | NET POSITIVE/(NEGATIVE)      |           |           |           |
|---------------------------------------------|------------------------------|-----------|-----------|-----------|
|                                             | <u>STATE OF REGISTRATION</u> |           |           |           |
|                                             | <u>TOTAL</u>                 | <u>AZ</u> | <u>CA</u> | <u>NV</u> |
| Paved access roads                          | 40%                          | 47%       | 37%       | 37%       |
| Informational signs                         | 30                           | 37        | 25        | 43        |
| Launching ramps                             | 26                           | 36        | 24        | (24)      |
| Parking facilities for vehicles             | 29                           | 29        | 24        | 21        |
| Picnic areas and facilities                 | 23                           | 33        | 15        | 21        |
| Campgrounds                                 | 23                           | 24        | 22        | 16        |
| Parking facilities for boat trailers        | 23                           | 28        | 19        | 22        |
| Swimming beaches                            | 17                           | 9         | 23        | 2         |
| Concessions for food, etc.                  | 16                           | 8         | 21        | 26        |
| Campsites accessible by boat only           | 12                           | 8         | 15        | 15        |
| Boat gas docks                              | 8                            | 9         | 5         | 21        |
| Sanitary dump facilities                    | 6                            | 4         | 5         | 27        |
| Public restrooms                            | 5                            | 17        | (5)       | 19        |
| Marinas with overnight docking spaces, etc. | 4                            | 8         | (1)       | 21        |
| Fish cleaning stations                      | 2                            | 0         | 3         | 36        |
| Courtesy docks                              | 1                            | 2         | 0         | 4         |
| Picnic areas accessible by boat only        | 0                            | (2)       | 2         | (26)      |
| Fishing piers                               | (8)                          | (3)       | (10)      | (25)      |
| First-aid stations                          | (10)                         | (8)       | (13)      | (12)      |
| Trash dumpsters accessible by boat          | (20)                         | (21)      | (18)      | (25)      |
| Drinking water outlets                      | (25)                         | (26)      | (25)      | (36)      |
| Emergency telephones                        | (28)                         | (26)      | (30)      | (30)      |

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8.4 Awareness Of SLIF Program

Awareness of the SLIF program has remained relatively steady at about ten percent over the past three studies. As usual, Arizona boaters reveal the highest program awareness with a reading of 12 percent – down two points from 2000.

TABLE 43: AWARENESS OF SLIF PROGRAM

"Next, the Arizona State Lake Improvement Fund, or SLIF, is a program designed to assist state and local governments in improving boating related resources and facilities. Were you aware of this program before I mentioned it just now?"

	% YES			
	<u>2003</u>	<u>2000</u>	<u>1997</u>	<u>1994</u>
TOTAL	9%	10%	8%	10%
Arizona	12	14	11	17
California	6	7	6	5
Nevada	8	9	4	0

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#### 8.5 Utilization Of SLIF Funds

After boaters had indicated their awareness of the SLIF program, they were asked to indicate how important they felt each of its six funding functions are. As Table 44 reveals, four of the six functions receive very or somewhat important readings from over eight out of ten boaters.

- ! The construction of first-aid stations and other safety facilities (88%);
- ! The purchasing of law enforcement and safety equipment such as patrol boats, radios and lights (87%);
- ! The construction of recreation support facilities such as restrooms, campgrounds and picnic tables (86%);
- ! The construction of water-based boating facilities such as marinas, launch ramps and piers (85%).

The remaining two functions – purchasing shoreline property (73%) and the development of new lakes for boating (72%) – are considered to be somewhat less important, but still are considered very or somewhat important by over seven in ten residents. These readings are virtually unchanged since 1997.

TABLE 44: UTILIZATION OF SLIF FUNDS

"The SLIF program is funded with revenues from boat registration fees and motor fuel taxes and there are six water-based boating functions for which these funds might be used. As I read them to you, please just tell me if you feel each one is very important, somewhat important, not very important or not at all important."

|                                                                                                    | Very | Some-<br>what | Not<br>Very | Not<br>At All | Not<br>Sure | % VERY/<br>SOMEWHAT |      |      |
|----------------------------------------------------------------------------------------------------|------|---------------|-------------|---------------|-------------|---------------------|------|------|
|                                                                                                    |      |               |             |               |             | 2003                | 2000 | 1997 |
| The construction of first-aid stations and other safety facilities                                 | 52%  | 36%           | 8%          | 3%            | 1%          | 88%                 | 88%  | 87%  |
| The purchasing of law enforcement and safety equipment such as patrol boats, radios and lights     | 61   | 26            | 7           | 5             | 1           | 87                  | 84   | 84   |
| The construction of recreation support facilities such as restrooms, campgrounds and picnic tables | 55   | 31            | 9           | 4             | 1           | 86                  | 89   | 89   |
| The construction of water-based boating facilities such as marinas, launch ramps and piers         | 51   | 34            | 9           | 5             | 1           | 85                  | 85   | 85   |
| The development of new lakes for boating use                                                       | 42   | 31            | 17          | 8             | 2           | 73                  | 72   | NA   |
| The purchasing of shoreline property at lakes which can be used for boating access                 | 36   | 36            | 15          | 10            | 3           | 72                  | 71   | 70   |

\*Indicates % less than .5

Note: not asked in 1994

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In the next SLIF question, boaters were asked if they felt the program's funds should be used mostly for renovations or new building. By nearly a two-to-one margin, boaters prefer renovation over new building (53% vs. 27%). This reading for renovation is virtually unchanged from the 2000 reading.

TABLE 45: SLIF FUNDING PRIORITIES

"And if you had a choice, would you prefer to see the SLIF program fund the renovation of deteriorating facilities or the building of new facilities?"

	<u>TOTAL</u>			<u>STATE OF REGISTRATION</u>		
	<u>2003</u>	<u>2000</u>	<u>1997</u>	<u>AZ</u>	<u>CA</u>	<u>NV</u>
Renovation	53%	55%	45%	54%	53%	48%
New building	27	27	32	26	28	25
Both equal	15	12	16	14	16	15
Not sure	<u>5</u>	<u>6</u>	<u>7</u>	<u>6</u>	<u>3</u>	<u>12</u>
	100%	100%	100%	100%	100%	100%

Note: not asked in 1994

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A new question was added to the 2000 study to determine boaters' preferences for the uses of a new lake, should one be developed. Seven different boating activities were evaluated and, as was the case in 2000, four received ratings of very or somewhat important by more than 80 percent of the boaters.

- General pleasure boating (94%);
- Fishing (91%);
- Water skiing (84%);
- Power boating (83%).

Jet skiing again received the lowest preference rating with 59 percent of boaters offering a very or somewhat important rating.

TABLE 46: PREFERRED USES OF NEW LAKE

"If a new lake is developed for boating, do you feel that it is very important, somewhat important, not very important or not at all important that the following uses be allowed?"

|                            | <u>Very</u> | <u>Some-<br/>what</u> | <u>Not<br/>Very</u> | <u>Not<br/>At All</u> | <u>Not<br/>Sure</u> | <u>% VERY/<br/>SOMEWHAT</u> |             |
|----------------------------|-------------|-----------------------|---------------------|-----------------------|---------------------|-----------------------------|-------------|
|                            |             |                       |                     |                       |                     | <u>2003</u>                 | <u>2000</u> |
| General pleasure boating   | 68%         | 26%                   | 3%                  | 2%                    | 1%                  | 94%                         | 94%         |
| Fishing                    | 65          | 26                    | 4                   | 4                     | 1                   | 91                          | 90          |
| Water skiing               | 54          | 30                    | 8                   | 7                     | 1                   | 84                          | 83          |
| Power boating              | 53          | 30                    | 9                   | 7                     | 1                   | 83                          | 81          |
| Canoeing and kay-<br>aking | 33          | 39                    | 17                  | 9                     | 2                   | 72                          | 73          |
| Sailing                    | 29          | 39                    | 19                  | 11                    | 2                   | 68                          | 69          |
| Jet skiing                 | 34          | 25                    | 15                  | 25                    | 1                   | 59                          | 55          |

Note: not asked in 1994 or 1997

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On a state-by-state basis, Arizona boaters reveal the highest preference for fishing and general pleasure boating, California boaters for general pleasure boating, water skiing, power boating and fishing and Nevada boaters for general pleasure boating. Also note that California boaters again give jet skiing a particularly high reading (70%).

TABLE 47: PREFERRED USES OF NEW LAKE BY STATE

% VERY/SOMEWHAT IMPORTANT

	TOTAL	STATE OF REGISTRATION		
		AZ	CA	NV
General pleasure boating	94%	93%	96%	92%
Fishing	91	93	90	86
Water skiing	84	76	91	79
Power boating	83	76	91	75
Canoeing and kayaking	72	74	71	74
Sailing	68	75	63	72
Jet skiing	59	44	70	52

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## 8.6 Law Enforcement Priorities

Stopping people who are boating recklessly (55%) and stopping people who are boating drunk (53%) continue to be the two law enforcement activities which boaters would most like to see increased at their favorite lake or river. The percent of boaters indicating more should be done remains on par with the levels recorded in 2000 for most activities except “providing weather warnings” (down from 39% to 31%) and “keeping boaters out of swimming or other restricted areas” (down from 27% to 21%).

TABLE 48: LAW ENFORCEMENT ACTIVITIES NEEDED

"As you know, agencies such as the Game & Fish Department, county sheriffs' offices and other agencies patrol Arizona's lakes and rivers. For each of the following, please tell me whether you think at (LAKE/RIVER) these agencies should be doing more than they are now, about what they are doing now, or less than they are doing now regarding."

% INDICATING "SHOULD BE DOING MORE"

|                                                                            | <u>TOTAL</u> |             |             |             | <u>STATE OF REGISTRATION</u> |           |           |
|----------------------------------------------------------------------------|--------------|-------------|-------------|-------------|------------------------------|-----------|-----------|
|                                                                            | <u>2003</u>  | <u>2000</u> | <u>1997</u> | <u>1994</u> | <u>AZ</u>                    | <u>CA</u> | <u>NV</u> |
| Stopping people who are boating recklessly                                 | 55%          | 55%         | 56%         | 70%         | 60%                          | 51%       | 55%       |
| Stopping people who are boating while drunk                                | 53           | 56          | 60          | 70          | 56                           | 51        | 55        |
| Providing first-aid stations                                               | 47           | 48          | 46          | 47          | 47                           | 47        | 47        |
| Educating boaters on safe boating operations and procedures                | 43           | 45          | 43          | 51          | 47                           | 40        | 46        |
| Marking submerged rocks and other hazards                                  | 42           | 43          | 38          | 53          | 35                           | 46        | 51        |
| Stopping people who overload their boat                                    | 41           | 43          | 41          | 53          | 46                           | 38        | 40        |
| Providing safety information on special hazards and conditions on the lake | 41           | 42          | 39          | 49          | 38                           | 43        | 40        |
| Stopping boats with excessive noise                                        | 34           | 33          | 36          | 44          | 38                           | 31        | 28        |
| Providing weather warnings                                                 | 31           | 39          | 35          | 33          | 32                           | 30        | 22        |
| Patrolling active use areas                                                | 31           | 34          | 34          | 45          | 35                           | 28        | 36        |
| Checking safety equipment on boats                                         | 29           | 30          | 31          | 36          | 31                           | 27        | 30        |
| Providing navigational aids                                                | 25           | 28          | 28          | 26          | 24                           | 25        | 32        |
| Providing rescue and emergency services                                    | 22           | 24          | 24          | 32          | 24                           | 22        | 14        |
| Keeping boaters out of swimming or other restricted areas                  | 21           | 27          | 28          | 37          | 27                           | 18        | 16        |

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In a related question, boaters were asked whether they agreed or disagreed with seven statements relating to law enforcement and safety issues at Arizona lakes. This line of questioning indicates that roughly eight out of ten boaters or more continue to agree with the following attitudes:

- ! That hands-on training should be required for boat rental customers: 87 percent compared to 85 percent in 2000.
- ! That penalties for operating a boat under the influence of drugs or alcohol should be the same as those for motor vehicles: 86 percent compared to 87 percent in 2000.
- ! That boating law violators should be required to take a boating safety class: 84 percent compared to 86 percent in 2000.
- ! That the minimum age for boat operators should be higher than 12 years old: 80 percent compared to 82 percent in 2000.
- ! That laws and regulations are being adequately enforced: 79 percent compared with 74 percent in 2000.

As has been the case in each study back to 1994, the only issue on which there is a strong split in opinion is on whether or not boaters should be required to obtain a license similar to that required to drive a car -- 41 percent agree and 57 percent disagree. On the final issue tested we find that 17 percent of boaters indicate they often experience conflicts with other lake users while 81 percent do not. This is virtually identical to the readings recorded in 2000.

**TABLE 49: ATTITUDES ON SELECTED LAW
ENFORCEMENT AND SAFETY ISSUES**

"Next, do you strongly agree, agree, disagree or strongly disagree with each of the following statements?"

	Strongly Agree	Agree	Dis- agree	Strongly Disagree	Not Sure	<u>TOTAL AGREE</u>			
						2003	2000	1997	1994
Rental boat operators in Arizona should be required to provide hands on training for their customers	27%	60%	9%	1%	3%	87%	85%	86%	86%
Penalties for operating a boat under the influence of drugs or alcohol on Arizona lakes should be the same as for driving a vehicle under the influence of drugs and alcohol	40	46	10	2	2	86	87	88	84
Volators of Arizona boating laws should be required to take a boating safety class	28	56	14	1	1	84	86	86	86
The minimum age for boat operators in Arizona should be higher than the current 12 years of age	35	45	16	3	1	80	82	78	74
Laws and regulations are being adequately enforced at my favorite Arizona lake	13	66	13	4	4	79	74	76	76
Boat operators in Arizona should be required to obtain a license similar to the drivers license required for automobile drivers	12	29	45	12	2	41	45	46	49
I often experience conflicts with other lake users at my favorite Arizona lake	3	14	65	16	2	17	19	20	NA

NA = not asked

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## 8.7 Attitudes On Various Water-based Recreation Issues

Boaters were asked a variety of agree/disagree questions on various water-based recreation issues. The primary finding from this series of questions is as follows:

- ! Eight out of ten boaters (79%) support boating safety educational centers at Arizona lakes – down one percentage point from the 2000 survey.
- ! A majority of boaters (60%) do not believe their favorite lake is too crowded while 37 percent do. This represents a negative shift of three points (“too crowded”) since 2000.
- ! 57 percent of boaters would support designating special areas for use only by jet skis – down three percentage points from 2000.
- ! Nearly six out of ten boaters (57%) would like more information on boating opportunities in Arizona – up one point since 2000.
- ! 51 percent of boaters believe their favorite lake needs additional developed campgrounds (off four points since 2000), while 50 percent believe it needs additional primitive campgrounds (off five points since 2000).
- ! Boaters continue to be split on whether the launch ramps at their favorite lake are too crowded (48% agree, 47% disagree). This is virtually unchanged since 2000.
- ! Boaters continue to be split on whether the number of people using a lake should be restricted during high use periods (46% agree, 49% disagree). This is virtually unchanged since 2000.
- ! 46 percent of boaters believe their favorite lake needs additional RV hookups while 46 percent do not. This level of support is also virtually unchanged since 2000.

**TABLE 50: ATTITUDES ON MISCELLANEOUS  
WATER-BASED RECREATION ISSUES**

“Next, do you strongly agree, agree, disagree or strongly disagree with each of the following statements?”

|                                                                                                                      | Strongly<br>Agree | Dis-<br>Agree | Strongly<br>agree | Dis-<br>agree | Not<br>Sure | <u>TOTAL AGREE</u> |      |      |      |
|----------------------------------------------------------------------------------------------------------------------|-------------------|---------------|-------------------|---------------|-------------|--------------------|------|------|------|
|                                                                                                                      |                   |               |                   |               |             | 2003               | 2000 | 1997 | 1994 |
| Arizona lakes should have education centers to provide the public with opportunities to learn about boating safety   | 18%               | 61%           | 17%               | 1%            | 3%          | 79%                | 80%  | 77%  | 84%  |
| I would support designating special areas for use only by jet skis                                                   | 27                | 30            | 30                | 11            | 2           | 57                 | 60   | NA   | NA   |
| I wish more information were available on boating opportunities in Arizona                                           | 7                 | 50            | 34                | 2             | 7           | 57                 | 56   | 61   | 60   |
| My favorite Arizona lake needs additional developed campgrounds with flush toilets and hot showers                   | 12                | 39            | 36                | 6             | 7           | 51                 | 55   | 56   | 47   |
| My favorite Arizona lake needs additional primitive type campgrounds with only drinking water and pit toilets        | 8                 | 42            | 36                | 5             | 9           | 50                 | 55   | 52   | 52   |
| The launch ramps at my favorite lake are too crowded when I want to use them                                         | 15                | 33            | 44                | 3             | 5           | 48                 | 50   | 50   | 46   |
| The number of people using a lake should be restricted during high use periods                                       | 8                 | 38            | 40                | 9             | 5           | 46                 | 47   | NA   | NA   |
| My favorite Arizona lake needs additional full hookup campsites with water and electricity for recreational vehicles | 10                | 36            | 41                | 5             | 8           | 46                 | 46   | 50   | 44   |
| My favorite Arizona lake is too crowded when I want to use it                                                        | 8                 | 29            | 55                | 5             | 3           | 37                 | 34   | 41   | 42   |

NA = not asked

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8.8 Recreational Activities Participated In

Boaters were next asked to indicate their single favorite boating activity. As was the case in 2000 and 1997, water skiing and fishing remain the two most popular activities (27% and 25%, respectively), with California boaters revealing a particularly high preference for water skiing (31%) and Arizona boaters reveal a particularly high preference for fishing (41%). Also notice the high reading for jet skiing among California boaters (14%) and the noteworthy increase in knee boarding since 2000 (5% today vs. 1% in 2000).

TABLE 51: RECREATIONAL ACTIVITIES – SINGLE FAVORITE

"Next, what is your single favorite boating activity on a typical boating trip?"

	<u>TOTAL</u>			<u>STATE OF REGISTRATION</u>		
	2003	2000	1997	Arizona	California	Nevada
Water skiing	27%	29%	32%	23%	31%	19%
Fishing	25	27	29	41	12	30
General pleasure boating	23	17	17	18	26	26
Jet skiing	12	10	12	9	14	9
Knee boarding	5	1	1	2	7	2
Tubing or rafting	3	2	1	2	4	0
Swimming	2	1	1	1	2	5
Sailing	1	2	1	1	1	5
Camping	*	2	1	*	0	0
Sunbathing	*	1	1	*	*	0
Canoeing/kayaking	*	1	1	*	*	2
Personal transportation	*	*	1	*	*	0
Other	<u>1</u>	<u>7</u>	<u>2</u>	<u>1</u>	<u>*</u>	<u>*</u>
	100%	100%	100%	100%	100%	100%

*Indicates percent less than .5

NA = not asked in 1994

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TABLE 52: RECREATIONAL ACTIVITIES -- TOTAL

"And, what other boating activities do you enjoy on a typical boating trip?"

|                          | <u>TOTAL</u> |             |             | <u>STATE OF REGISTRATION</u> |                   |               |
|--------------------------|--------------|-------------|-------------|------------------------------|-------------------|---------------|
|                          | <u>2003</u>  | <u>2000</u> | <u>1997</u> | <u>Arizona</u>               | <u>California</u> | <u>Nevada</u> |
| Water skiing             | 47%          | 48%         | 52%         | 39%                          | 53%               | 37%           |
| General pleasure boating | 48           | 35          | 42          | 43                           | 52                | 52            |
| Fishing                  | 40           | 41          | 43          | 56                           | 28                | 42            |
| Jet skiing               | 22           | 25          | 22          | 15                           | 28                | 18            |
| Tubing or rafting        | 13           | 10          | 8           | 11                           | 14                | 6             |
| Knee boarding            | 11           | 6           | 5           | 6                            | 14                | 5             |
| Swimming                 | 7            | 8           | 9           | 8                            | 6                 | 16            |
| Camping                  | 6            | 8           | 7           | 6                            | 6                 | 12            |
| Picnicking               | 2            | 4           | 5           | 3                            | 2                 | 0             |
| Sailing                  | 2            | 4           | 3           | 2                            | 2                 | 7             |
| Sunbathing               | 1            | 4           | 4           | 1                            | 1                 | 2             |
| Canoeing/kayaking        | 1            | 3           | 1           | 2                            | 1                 | 2             |
| Personal transportation  | 1            | 1           | 2           | 1                            | 2                 | 0             |
| Other                    | 1            | 15          | 2           | 1                            | 1                 | 1             |

\*Indicates percent less than .5

Note: Totals exceed 100% due to multiple responses

~~~~~

9.0 RECOMMENDATIONS

- ! The new data collection sequencing utilized on the past three studies whereby the data collection effort was divided into 24, two-week segments, should be continued. This method produces far more accurate and useful fuel consumption and use data than previous methods.
- ! Inclusion of Utah boaters in the survey provides valuable data and all efforts should be made to include Utah in the next study.
- ! Collection of the 12-month data set on boat use and person use days provides valuable data for the State Parks Board and should be continued.

10.0 APPENDIX

- 10.1 Survey Questionnaire
- 10.2 Audit Forms
- 10.3 Agreement of the Agencies

10.1 Survey Questionnaire

Hello, my name is _____ and I'm calling for Behavior Research Center of Arizona. We're conducting a study for the Arizona Game and Fish Department on boating on Arizona lakes and rivers, and I'd like to talk to you for a few minutes about your _____ boat. Are you or is someone else in your household the primary user of your boat?

Arizona...1
California...2
Nevada...3
Utah...4

CALLBACK INFO: _____

1. To start, was your boat used on Arizona lakes and rivers, including the Colorado River, during the (FIRST/LAST) two weeks of (MONTH)? For the purpose of this study, any location on the Colorado River or its various lakes is considered Arizona.

_____ (GO TO Q3) Yes...1
_____ (GO TO Q2) No...2
(GO TO Q2) Don't know/Refused...3

2. Did you use your boat on Arizona lakes and rivers including the Colorado River, any time during the past 12 months?

_____ (GO TO Q2a) Yes...1
_____ (GO TO Q2b) No...2
(GO TO Q2B) Don't know/Refused...3

2a. And on how many total days was your boat used on Arizona lakes and rivers including the Colorado River during the past 12 months?

NUMBER ____/____/____

(GO TO Q15)

2b. Was there any particular reason your boat wasn't used in Arizona? (RECORD ALL MENTIONS; DO NOT READ LIST)

Boat inoperable, broken down...01
Expense, could not afford...02
Too busy, no time...03
Lost interest, prefer other recreational forms...04
Out-of-state resident, use only in other state...05
Don't know where to go...06
Too far to go...07
Too crowded...08
_____ Other (PROBE & RECORD)...09
Don't know/Refused...10

THANK RESPONDENT AND TERMINATE

3. How many days was your boat used on Arizona lakes and rivers, including the Colorado River, during the (FIRST/LAST) two weeks of (MONTH)?

NUMBER ____/____/____

(IF DON'T KNOW/REFUSED, GO TO Q16)

4. And on how many total days was your boat used on Arizona lakes and rivers including the Colorado River during the past 12 months?

NUMBER ____/____/____

5. Does your boat have a gas powered motor on it?

_____ (GO TO Q6) Yes...1
_____ (GO TO Q11) No...2
(GO TO Q11) Don't know/Refused...3

6. What type of fuel does your boat use -- gasoline, diesel or aviation?

Gasoline...1
Diesel...2
Aviation...3
Don't know/Not sure...4

7. And what is the horsepower of your boat engine? HORSEPOWER ____/____/____
8. On a typical day boating in Arizona during the (FIRST/LAST) two weeks of (MONTH) how many gallons of fuel did you use in your boat per day? GALLONS ____/____/____
9. What percentage of the fuel you used in your boat did you buy in Arizona? PERCENT ____/____/____
10. And what percentage of your Arizona fuel did you buy... (READ EACH; MAKE SURE THE TOTAL EQUALS 100%)
AT ARIZONA GAS STATIONS ____/____/____
AT ARIZONA GAS MARINAS ____/____/____
AT OTHER ARIZONA LOCATIONS ____/____/____
100%

11. Earlier you mentioned that you used your boat a total of (Q3 TOTAL) days in Arizona during the (FIRST/LAST) two weeks of (MONTH). What I'd like you to tell me now is first, at which lakes or rivers, including the Colorado River you spent the first and then second, how many days you spent at each lake or river you visited.

11a. (FOR EACH LAKE/RIVER VISITED, ASK): When you visited (LAKE/RIVER) during the (LAST/FIRST) two weeks of (MONTH), how many people, including yourself, were usually in your immediate boating party?

Colorado River and its lakes... (IF PERSON SIMPLY SAYS "COLORADO RIVER", PROBE FOR SPECIFIC LOCATION)

	Q11 DAYS	Q11a SIZE		Q11a DAYS	Q11 SIZE
01- Lake Powell			39- Horseshoe		
02- Glen Canyon Dam to Lees Ferry			40- Horsethief Basin		
03- Grand Canyon			41- Kaibab		
04- Lake Mead			42- Kennedy		
05- Lake Mohave (Hoover Dam to Davis Dam)			43- Kinnikinick		
06- Davis Dam to Topock			44- Knoll		
07- Topock Gorge			45- Lakeside		
08- Lake Havasu			46- Lee Valley		
09- Parker Strip (Parker Dam to Headgate Rock Dam)			47- Little Bog		
10- Headgate Rock Dam to Ehrenberg			48- Long		
82- EHRENBURG TO THE NORTH END OF MARTINEZ LAKE			49- Luna		
11- Martinez Lake to Imperial Dam			50- Lyman		
12- Mitty Lake (Imperial Dam to Morels Dam)			51- Lynx		
			52- Mexican Hay		
			53- Mitty		
			54- Mormon		
			55- McCormick		
			56- Nelson Reservoir		
			57- Painted Rocks		
			58- Parker Canyon		
			59- Patagonia		
			60- Pena Blanca		
			61- Picacho Reservoir		
			62- Pleasant		
			63- Rainbow		
			64- Reservation		
			65- Roosevelt		
			66- Roper		
			67- Saguaro		
			68- Salt River		
			69- San Carlos		
			70- Scotts Reservoir		
			71- Show Low		
			72- Silverbell		
			73- Squaw Lake		
			74- Stoneman		
			75- Sunrise		
			86- TEMPE TOWN		
			76- Upper Lake Mary		
			77- Verde River		
			87- WATSON		
			78- Whitehorse		
			88- WHITE MOUNTAIN		
			79- Willow Springs		
			80- Woods Canyon		
			81- Other (PROBE & RECORD)		

Other Arizona Lakes

13- Alamo		
14- Alford		
15- Apache		
16- Arivaca		
17- Ashurst		
18- Bartlett		
19- Bear Canyon		
83- BECKER		
20- Big		
21- Black Canyon		
22- Blue Ridge		
23- Bunch Lake		
24- Canyon		
25- Cataract		
26- Chapparal		
27- Cheylon		
28- Cholla		
29- Concho		
84- COOLEY		
30- Clear Creek		
31- Crescent		
32- Dobson		
85- DOG TOWN		
33- Drift Fence		
34- Fire Bird		
35- Fool's Hollow		
36- Goldwater		
37- Greer		
38- Hawley		

12. Next, on how many separate trips was your boat used in Arizona during the (FIRST/LAST) two weeks of (MONTH)?

NUMBER: ____/____/____

13. And on approximately how many total trips was your boat used in Arizona during the past 12 months?

NUMBER: ____/____/____

14. On your last boating trip in Arizona during the (FIRST/LAST) two weeks of (MONTH), how much money did you and the other members of your boating party spend on the following items? (READ EACH)

A. For overnight lodging at hotels and motels..... AMOUNT: / / / /

B. At restaurants and bars AMOUNT: / / / /

C. For food and beverages purchased at retail stores..... AMOUNT: / / / /

D. For equipment rental, tackle, bait and gasoline..... AMOUNT: / / / /

E. For entry fees or permits AMOUNT: / / / /

F. For gifts, souvenirs, clothing and other personal items AMOUNT: / / / /

G. For any other items directly related to your boating trip which I haven't mentioned AMOUNT: / / / /

(GO TO Q16)

15. You mention that you used your boat a total of (Q2a TOTAL) days in Arizona during the past 12 months. What I'd like you to tell me now is first, at which lakes or rivers, including the Colorado River, you spent this time, and then second, how many days you spent at each lake or river you visited.

15a. (FOR EACH LAKE/RIVER VISITED, ASK): When you visited (LAKE/RIVER) during the past 12 months, how many people, including yourself, were usually in your immediate boating party?

Colorado River and its lakes... (IF PERSON SIMPLY SAYS "COLORADO RIVER", PROBE FOR SPECIFIC LOCATION)

	Q15 DAYS	Q15a SIZE	Q15	Q15a	DAYS	SIZE
01- Lake Powell	_____	_____	39- Horseshoe	_____	_____	_____
02- Glen Canyon Dam to Lees Ferry	_____	_____	40- Horsethief Basin	_____	_____	_____
03- Grand Canyon	_____	_____	41- Kaibab	_____	_____	_____
04- Lake Mead	_____	_____	42- Kennedy	_____	_____	_____
05- Lake Mohave (Hoover Dam to	_____	_____	43- Kinnikinick	_____	_____	_____
Davis Dam)	_____	_____	44- Knoll	_____	_____	_____
06- Davis Dam to Topock	_____	_____	45- Lakeside	_____	_____	_____
07- Topock Gorge	_____	_____	46- Lee Valley	_____	_____	_____
08- Lake Havasu	_____	_____	47- Little Bog	_____	_____	_____
09- Parker Strip (Parker Dam to	_____	_____	48- Long	_____	_____	_____
Headgate Rock Dam)	_____	_____	49- Luna	_____	_____	_____
10- Headgate Rock Dam to Ehrenberg	_____	_____	50- Lyman	_____	_____	_____
82- EHRENBURG TO THE NORTH END	_____	_____	51- Lynx	_____	_____	_____
OF MARTINEZ LAKE	_____	_____	52- Mexican Hay	_____	_____	_____
11- Martinez Lake to Imperial Dam	_____	_____	53- Mittry	_____	_____	_____
12- Mittry Lake (Imperial Dam to	_____	_____	54- Mormon	_____	_____	_____
Morels Dam)	_____	_____	55- McCormick	_____	_____	_____
			56- Nelson Reservoir	_____	_____	_____
<u>Other Arizona Lakes</u>			57- Painted Rocks	_____	_____	_____
13- Alamo	_____	_____	58- Parker Canyon	_____	_____	_____
14- Alford	_____	_____	59- Patagonia	_____	_____	_____
15- Apache	_____	_____	60- Pena Blanca	_____	_____	_____
16- Arivaca	_____	_____	61- Picacho Reservoir	_____	_____	_____
17- Ashurst	_____	_____	62- Pleasant	_____	_____	_____
18- Bartlett	_____	_____	63- Rainbow	_____	_____	_____
19- Bear Canyon	_____	_____	64- Reservation	_____	_____	_____
83- BECKER	_____	_____	65- Roosevelt	_____	_____	_____
20- Big	_____	_____	66- Roper	_____	_____	_____
21- Black Canyon	_____	_____	67- Saguaro	_____	_____	_____
22- Blue Ridge	_____	_____	68- Salt River	_____	_____	_____
23- Bunch Lake	_____	_____	69- San Carlos	_____	_____	_____
24- Canyon	_____	_____	70- Scotts Reservoir	_____	_____	_____
25- Cataract	_____	_____	71- Show Low	_____	_____	_____
26- Chapparal	_____	_____	72- Silverbell	_____	_____	_____
27- Cheylon	_____	_____	73- Squaw Lake	_____	_____	_____
28- Cholla	_____	_____	74- Stoneman	_____	_____	_____
29- Concho	_____	_____	75- Sunrise	_____	_____	_____
84- COOLEY	_____	_____	86- TEMPE TOWN	_____	_____	_____
30- Clear Creek	_____	_____	76- Upper Lake Mary	_____	_____	_____
31- Crescent	_____	_____	77- Verde River	_____	_____	_____
32- Dobson	_____	_____	87- WATSON	_____	_____	_____
85- DOG TOWN	_____	_____	78- Whitehorse	_____	_____	_____
33- Drift Fence	_____	_____	88- WHITE MOUNTAIN	_____	_____	_____
34- Fire Bird	_____	_____	79- Willow Springs	_____	_____	_____
35- Fool's Hollow	_____	_____	80- Woods Canyon	_____	_____	_____
36- Goldwater	_____	_____	81- Other (PROBE & RECORD)	_____	_____	_____
37- Greer	_____	_____		_____	_____	_____
38- Hawley	_____	_____		_____	_____	_____

16. To which one Arizona lake or river, including the Colorado River, did you go most often during the past 12 months?

NAME/CODE: _____

17. Next, what would you say are the two or three most needed facilities at (LAKE/RIVER MENTIONED IN Q16)?

17a. And what would you say are the two or three most needed services at (LAKE/RIVER MENTIONED IN Q16)?

18. (SQ-1) Now I'd like to read you a list of various boating and water-based recreational facilities. As I do, please just tell me if you would rate each as excellent, good, only fair, or poor at (LAKE/RIVER MENTIONED IN Q16) If any of the facilities I mention aren't located at (LAKE/RIVER MENTIONED IN Q16), please just say so. (READ EACH; ROTATE)

	Excel- lent	Only Good	Fair	Not Poor	Sure	NA/Are None
A. Launching ramps	1	2	3	4	5	6
B. Marinas with overnight docking spaces, boat rental, fuel, and boat repair, etc.....	1	2	3	4	5	6
C. First aid stations	1	2	3	4	5	6
D. Campgrounds	1	2	3	4	5	6
E. Swimming beaches	1	2	3	4	5	6
F. Drinking water outlets	1	2	3	4	5	6
G. Parking facilities for boat trailers.....	1	2	3	4	5	6
H. Sanitary dump facilities.....	1	2	3	4	5	6
I. Informational signs	1	2	3	4	5	6
J. Picnic areas accessible by boat only	1	2	3	4	5	6
K. Boat gas docks	1	2	3	4	5	6
L. concessions that sell food, bait, drinks, tackle, etc.....	1	2	3	4	5	6
M. Public restrooms.....	1	2	3	4	5	6
N. Campsites accessible by boat only.....	1	2	3	4	5	6
O. Picnic areas and facilities	1	2	3	4	5	6
P. Parking facilities for vehicles	1	2	3	4	5	6
Q. Paved access roads	1	2	3	4	5	6
R. Courtesy docks.....	1	2	3	4	5	6
S. Trash dumpsters accessible by boat.....	1	2	3	4	5	6
T. Fish cleaning stations	1	2	3	4	5	6
U. Emergency telephones.....	1	2	3	4	5	6
V. Fishing piers	1	2	3	4	5	6

19. (SQ-1) As you know, agencies such as the Game & Fish Department, County Sheriffs' offices and other agencies patrol Arizona's lakes and rivers. For each of the following, please tell me whether you think at (LAKE/RIVER MENTIONED IN Q16) these agencies should be doing more than they are now, about what they are doing now, or less than they are doing now regarding... (READ EACH; ROTATE)

More	Same	Less	Not Sure
------	------	------	----------

A. Providing weather warnings.....	1	2	3	4
B. Stopping people who are boating while drunk	1	2	3	4
C. Marking submerged rocks and other hazards	1	2	3	4
D. checking safety equipment on boats	1	2	3	4
E. Stopping boats with excessive noise	1	2	3	4
F. Patrolling active use areas	1	2	3	4
G. Providing rescue and emergency services.....	1	2	3	4
H. Providing navigational aids	1	2	3	4
I. Providing safety information on special hazards and conditions on the lake	1	2	3	4
J. Keeping boaters out of swimming or other restricted areas	1	2	3	4
K. Stopping people who overload their boat	1	2	3	4
L. Stopping people who are boating recklessly	1	2	3	4
M. Providing first-aid stations	1	2	3	4
N. Educating boaters on safe boating operations and procedures	1	2	3	4

20. (SQ-2) Next, the Arizona State Lake Improvement Fund, or SLIF, is a program designed to assist state and local governments in improving boating related resources and facilities. Were you aware of this program before I mentioned it just now?
- Yes...1
No...2
Don't know/Unsure...3

- 20a. (SQ-2) The SLIF program is funded with revenues from boat registration fees and motor fuel taxes and there are six water-based boating functions for which these funds might be used. As I read them to you, please just tell me if you feel each one is very important, somewhat important, not very important or not at all important. (READ EACH; ROTATE).

Very	Some-what	Not Very	Not At All	Not Sure
------	-----------	----------	------------	----------

A. The construction of water-based boating facilities such as marinas, launch ramps and piers	1	2	3	4	5
B. The purchasing of law enforcement and safety equipment such as patrol boats, radios and lights	1	2	3	4	5
C. The construction of recreation support facilities such as restrooms, campgrounds and picnic tables	1	2	3	4	5
D. The purchasing of shoreline property at lakes which can be used for boating access.....	1	2	3	4	5
E. The construction of first-aid stations and other safety facilities	1	2	3	4	5
F. The development of new lakes for boating use	1	2	3	4	5

- 20b. (SQ-2) If a new lake is developed for boating, do you feel that it is very important, somewhat important, not very important or not at all important that the following uses be allowed? (READ EACH; ROTATE)

Very	Some-what	Not Very	Not At All	Not Sure
------	-----------	----------	------------	----------

A. Fishing	1	2	3	4	5
B. Waterskiing.....	1	2	3	4	5
C. Jet skiing.....	1	2	3	4	5
D. General pleasure boating	1	2	3	4	5
E. Power boating	1	2	3	4	5
F. Canoeing and kayaking	1	2	3	4	5
G. Sailing	1	2	3	4	5

20c. (SQ-2) And if you had a choice, would you prefer to see the SLIF program fund the renovation of deteriorating facilities or the building of new facilities?

Renovation...1
New facilities...2
(DON'T READ) Both equal...3
(DON'T READ) Not sure...4

21. (SQ-3) Next, do you strongly agree, agree, disagree or strongly disagree with each of the following statements? (READ EACH; BEGIN WITH CIRCLED LETTER).

	Strongly Agree	Agree	Dis- agree	Strongly Disagree	Not Sure
A. My favorite Arizona lake is too crowded when I want to use it	1	2	3	4	5
B. My favorite Arizona lake needs additional primitive type campgrounds with only drinking water and pit toilets	1	2	3	4	5
C. Laws and regulations are being adequately enforced at my favorite Arizona lake	1	2	3	4	5
D. The launch ramps at my favorite lake are too crowded when I want to use them	1	2	3	4	5
E. My favorite Arizona lake needs additional developed campgrounds with flush toilets and hot showers	1	2	3	4	5
F. I wish more information were available on boating opportunities in Arizona.....	1	2	3	4	5
G. I would support designating special areas for use only by jet skis	1	2	3	4	5
H. Arizona lakes should have education centers to provide the public with opportunities to learn about boating safety	1	2	3	4	5
I. My favorite Arizona lake needs additional full hookup campsites with water and electricity for recreational vehicles.....	1	2	3	4	5
J. Boat operators in Arizona should be required to obtain a license similar to the drivers license required for automobile drivers	1	2	3	4	5
K. Violators of Arizona boating laws should be required to take a boating safety class	1	2	3	4	5
L. Penalties for operating a boat under the influence of drugs or alcohol in Arizona should be the same as for driving a vehicle under the influence of drugs and alcohol.....	1	2	3	4	5
M. The minimum age for boat operators in Arizona should be higher than the current 12 years of age.....	1	2	3	4	5
N. Rental boat operators in Arizona should be required to provide hands on training for their customers.....	1	2	3	4	5
O. I often experience conflicts with other lake users at my favorite Arizona lake	1	2	3	4	5
P. The number of people using a lake should be restricted during high use periods	1	2	3	4	5

22. (SQ-3) Next, what is your single favorite boating activity on a typical boating trip?

Water skiing...01
Fishing...02
General pleasure boating...03
Jet skiing...04
Swimming...05
Knee boarding...06
Tubing or rafting...07
Picnicking...08
Camping...09
Personal transportation...10
Sailing...11
Sunbathing...12
Canoeing/Kayaking...13
Other (PROBE & RECORD)...14
Don't know/Not sure...15

22a. (SQ-3) And what other boating activities do you enjoy on a typical boating trip?

Water skiing...01
Fishing...02
General pleasure boating...03
Jet skiing...04
Swimming...05
Knee boarding...06
Tubing or rafting...07
Picnicking...08
Camping...09
Personal transportation...10
Sailing...11
Sunbathing...12
Canoeing/Kayaking...13
Other (PROBE & RECORD)...14
Don't know/Not sure...15

23. And finally, what county do you live in?

COUNTY: ____/____/____

Thank you very much, that completes this interview. My supervisor may want to call you to verify that I conducted this interview so may I have your first name so that they may do so? (VERIFY PHONE NUMBER)

NAME: _____ PHONE #: () _____

ADMINISTRATIVE DATA:

INTERVIEWER NAME: _____ #: _____

VALIDATED BY: _____ # _____

CODED BY: _____ #: _____

FROM SAMPLE: _____ BOAT CLASS: _____

10.2 Audit Forms

- Marina audits/survey forms
- Public agency forms
- Excursion/livery forms

April 2003

Dear Marina Owner/Operator:

The Arizona Game and Fish Department, the Arizona Department of Transportation, and the State Parks Board are required by law to complete an Arizona Watercraft Survey every three years for the purpose of determining the amount of fuel sold within Arizona that is used for propelling watercraft. This percentage is then used in determining the amount of fuel tax revenue to be allocated to the State Lake Improvement Fund for water-based recreation improvements.

We need specific information from you to be able to complete this survey. Please take a few minutes to complete the enclosed forms and promptly return them to Behavior Research Center in the postage-paid envelope provided for your convenience. Behavior Research Center has been contracted to complete the Arizona Watercraft Survey.

The information you provide will remain strictly confidential and will only be used for statistical purposes. Please return this form even if your agency did not sell any Arizona fuel during 2002. Your information is critical to the successful completion of the study. If you have any questions about this project, please call Bruce Hernandez of Behavior Research Center, (602) 258-4554.

Thank you for your cooperation and information.

Sincerely,

Duane L. Shroufe
Director

DLS:vjv

Enclosures

ARIZONA WATERCRAFT SURVEY

MARINA INVENTORY FORM

Confidential Information

Name of Facility: _____

(If the above address label is incorrect,
please make any necessary corrections)

Owner/Operator/Contact: _____

Person filling out form: _____
(If same, please indicate)

Telephone number: _____

1. Please answer the following two questions in the table provided below. If you do not have an exact number or percentage, please give your best estimate. Your information is strictly confidential and will be used for statistical purposes only.

- 1a. How many gallons of marine fuel did your facility sell during each month of 2002?
- 1b. What percentage of this fuel was sold to non-Arizona boaters each month? Please note that this information will be strictly confidential and used only for statistical purposes.

<u>MONTH/YEAR</u>	<u>Q1a</u> NUMBER OF GALLONS SOLD	<u>Q1b</u> PERCENT SOLD TO NON-ARIZONA BOATERS
January 2002		
February 2002		
March 2002		
April 2002		
May 2002		
June 2002		
July 2002		
August 2002		
September 2002		
October 2002		
November 2002		
December 2002		
TOTAL GALLONS		

(over please)

2. What percentage of total gallons mentioned in Q.1a was purchased from Arizona gasoline distributors? _____ %

3. Does your facility have watercraft (i.e., boats, jet skis, houseboats, etc.) available on a rental basis? (Check one of the following)

___ Yes ___ No

3a. **(if yes)** How many gallons of marine fuel were used by your rental watercraft during 2002? (Please do not report any fuel that was included in Q.1a.)

No. of gallons _____

Please complete the above information and the enclosed referral form and promptly return to Behavior Research Center, Inc., 1101 North First Street, Phoenix, AZ 85004, in the postage paid envelope provided.

Thank you for your assistance.

REFERRAL FORM

The following is a list of marinas who have been contacted in past Watercraft Surveys. To help survey all possible marinas, please review those marinas shown in your area. If we have overlooked any, please indicate their names, addresses, and telephone numbers in the space provided below. If we have not overlooked any, please indicate so by writing "NONE" below. Please return this form to us along with your completed Marina Inventory Form. Thank you for your assistance.

Colorado River Marinas

Ah Ha Quin, Blythe, CA
Big Bend Resort, Parker Dam, CA
Black Meadow Landing, Parker Dam, CA
Blue Water Marine & RV Park, Parker, AZ
Branson's Resort Marina, Parker, AZ
Buckskin State Park Marina, Parker, AZ
Bullfrog Resort & Marina, Lake Powell, UT
Callville Bay Resort & Marina, Las Vegas, NV
Cottonwood Cove Marina, Cottonwood Cove, NV
Echo Bay Resort, Overton, NV
Echo Lodge Resort, Parker Dam, CA
Emerald Cove Resort, Parker, AZ
Fisher's Landing, Yuma, AZ
Five Mile Landing, Topock, AZ
Fox's RV Park & Tavern, Parker, AZ
Golden Shores Marina, Topock, AZ
Halls Crossing Marina, Lake Powell, UT
Havasus Landing Resort, Havasu Lake, AZ
Havasus Springs Resort, Parker, AZ
Hidden Cove Trailer Park and Marina, Yuma, AZ
Hite Resort & Marina, Hite, UT
Holiday Shores Store/Marina, Bullhead City, AZ
Imperial Oasis, Yuma, AZ
Lake Havasu Marina, Lake Havasu City, AZ
Lake Havasu Yacht Club, Lake Havasu City, AZ
Lake Mead Resort Marina, Boulder City, NV
Lake Mohave Resort/Seven Resorts, Inc.,
Bullhead City, AZ
Las Vegas Marina, Henderson, NV
Lost Lake Resort, Blythe, CA
Martinez Lake Marina, Martinez Lake, AZ
Needles Marina Park, Needles, CA
Park Moabi Marina, Needles, CA
Red Rooster, Blythe, CA
Rio Del Colorado, Earp, CA
River Island Market, Parker, AZ

River Lodge Resort, Parker Dam, CA
Riverland Resort, Earp, CA
Riviera RV Resort & Marina, Blythe, CA
Sand Point Marina & RV Park, Lake Havasu
City, AZ
Sunset Landing Trailer Park, Bullhead City, AZ
Sunshine Marina, Bullhead City, AZ
Sunshine Resort, Parker Dam, CA
Temple Bar Resort, Inc., Temple Bar, AZ
Wahweap Lodge Marina, Page, AZ
Water Wheel, Blythe, CA
Wheel-er In Family Resort, Earp, CA
Willow Beach Resort, Willow Beach, AZ
Windmall Resort, Earp, CA

Interior Arizona Marinas

Alamo Lake Store, Scottsdale, AZ
Apache Lake Marina & Resort, Apache Lake,
AZ
Bartlett Lake Marina, Carefree, AZ
Big Lake Tackle & Supply, Springerville, AZ
Canyon Lake Marina, Mesa, AZ
Crescent Lake Marina, Springerville, AZ
Hawley Lake Store, White River, AZ
Lake Patagonia Marina, Patagonia, AZ
Lyman Lake Marina, St. Johns, AZ
Parker Canyon Lake Marina, Sonoita, AZ
Pleasant Harbor Marina, Peoria, AZ
Rainbow Lake Lodge Resort, Lakeside, AZ
Ray Ruiz Marina, Apache Junction, AZ
Roosevelt Lake Marina, Roosevelt Lake, AZ
Saguaro Lake Marina, Mesa, AZ
San Carlos Lake Development Corporation,
Peridot, AZ
Showlow Lake Trailer Park & RV Sales,
Showlow, AZ
Woods Canyon Lake Store/Marina, Heber,
AZ

NAME	ADDRESS	TELEPHONE
_____	_____	_____
_____	_____	_____

April 2003

Dear Agency Manager:

Arizona Revised Statutes, Section 28-1502.91, requires that the Arizona Game and Fish Department, the Arizona Department of Transportation, and the State Parks Board complete an Arizona Watercraft Survey every three years for the purpose of determining the amount of fuel sold within Arizona that is used for propelling watercraft. This percentage is then used in determining the amount of fuel tax revenue to be allocated to the State Lake Improvement Fund for water-based recreation improvements.

We need specific information from you to be able to complete this survey. Please take a few minutes to complete the enclosed forms and promptly return them to Behavior Research Center in the postage-paid envelope provided for your convenience. Behavior Research Center has been contracted to complete the Arizona Watercraft Survey.

The information you provide will remain strictly confidential and will only be used for statistical purposes. Please return this form even if your agency did not use any fuel in boats during 2002. Your information is critical to the successful completion of the study. If you have any questions about this project, please call Bruce Hernandez of Behavior Research Center, (602) 258-4554.

Thank you for your cooperation and information.

Sincerely,

Duane L. Shroufe
Director

DLS:vjv

Enclosures

ARIZONA WATERCRAFT SURVEY
PUBLIC AGENCY INVENTORY FORM

Confidential Information

Name of Agency: _____

(If the above address label is incorrect,
please make any necessary corrections)

Agency Person
Responsible For
Watercraft: _____

Title of Person: _____

Telephone Number: _____

- | | |
|---|----------------|
| A. How many gallons of fuel did your agency
(or agency representative such as Coast
Guard auxiliary, water posse, etc., for
which your agency purchased watercraft
fuel) use on Arizona lakes and rivers,
including the Colorado River, in 2002? | No. of gallons |
| | |
| B. What percentage of the total gallons mentioned in
Q.A was purchased from commercial marina sources? | _____ % |
| C. What percentage of the total gallons mentioned in Q.A
did your agency pay fuel tax in 2002? | _____ % |

Please complete the above information and promptly return to Behavior Research Center,
Inc., 1101 North First Street, Phoenix, AZ 85004, in the postage paid envelope provided.

Thank you for your assistance.

April 2003

Dear Manager:

The Arizona Game and Fish Department, the Arizona Department of Transportation, and the State Parks Board are required by law to complete an Arizona Watercraft Survey every three years for the purpose of determining the amount of fuel sold within Arizona that is used for propelling watercraft. This percentage is then used in determining the amount of fuel tax revenue to be allocated to the State Lake Improvement Fund for water-based recreation improvements.

We need specific information from you concerning the total gallons of fuel your company used during 2002 within Arizona and on the Colorado River to be able to complete this survey. Please take a few minutes to complete the enclosed forms and promptly return them to Behavior Research Center in the postage-paid envelope provided for your convenience. Behavior Research Center has been contracted to complete the Arizona Watercraft Survey. If you have any questions about this project, please call Bruce Hernandez of Behavior Research Center, (602) 258-4554.

The information you provide will remain strictly confidential and will only be used for statistical purposes. Please return this form even if your facility did not sell any Arizona fuel during 2002. Your information is critical to the successful completion of the study.

Thank you for your cooperation and information.

Sincerely,

Duane L. Shroufe
Director

DLS:vjv

Enclosures

ARIZONA WATERCRAFT SURVEY
EXCURSION/LIVERY INVENTORY FORM

Confidential Information

Name of Operator: _____

(If the above address label is incorrect,
please make any necessary corrections)

Owner/Operator/Contact: _____

Person filling out form: _____
(If same, please indicate)

Telephone number: _____

- | | | |
|----|--|----------------|
| A. | How many gallons of marine fuel did your company use during 2002 on Colorado River expeditions or in its livery/rental operations at any locations in Arizona? | No. of gallons |
| B. | What percentage of the total gallons mentioned in Q.A was purchased from an Arizona gasoline distributor? | _____ % |
| C. | What percentage of the total gallons mentioned in Q.A were purchased from commercial marinas? | _____ % |

Please complete the above information and the enclosed referral form and promptly return to Behavior Research Center, Inc., 1101 North First Street, Phoenix, AZ 85004, in the postage paid envelope provided.

Thank you for your assistance.

REFERRAL FORM

The following is a list of excursion/livery operators who have been contacted in past Watercraft Surveys. We are contacting marina operators separately, so please examine the following list as it only relates to excursion/livery operators. If we have overlooked any in your area, please provide us with their names, addresses, and telephone numbers in the space provided. If we have not overlooked any to your knowledge, please write "NONE." Please return this form to us along with your completed excursion/livery inventory form. Thank you for your assistance!

2 Wheels Motorcycle Repair, Bullhead City, AZ
7 Crown Resorts, Irvine, CA
A Rocco's Racing, Phoenix, AZ
A Jet Ski Rental, Phoenix, AZ
A. A. Best, Phoenix, AZ
AAA Rentals, Lake Havasu City, AZ
Adrenaline Rush Rentals, Phoenix, AZ
Action Water Sports, Henderson, NV
Adler's Cruises, Lake Havasu City, AZ
Alamo Lake Boat Rentals, Scottsdale, AZ
All Rainbow Rentals, Henderson, NV
All Wet Sports, Bullhead City, AZ
Anchors Aweigh Rental & Storage, Page, AZ
Antelope Travel & Rec. Ctr., Page, AZ
Aramark Sports & Entertainment, Page, AZ
Arizona Aqua, Mesa, AZ
Arizona Aqua Jet, Tempe, AZ
Arizona Aquatics, Lake Havasu City, AZ
Arizona Jet Ski Center, Phoenix, AZ
Arizona Jet Ski Rentals, Lake Havasu City, AZ
Avi Resort & Casino, Laughlin, NV
AZ Jet Ski Rentals, Parker Dam, AZ
AZ River Runners, Inc., Phoenix, AZ
Aztec Storage Center, Tempe, AZ
Barnacle Bill's Boat Rental, Lake Havasu City, AZ
Beach Rentals, Lake Havasu City, AZ
Big Boyz Toyz, Phoenix, AZ
Blue Rivers, Flagstaff, AZ
Blue Water Charter, Lake Havasu City, AZ
Blue Water Rentals, Lake Havasu City, AZ
Boatel Catamarans, Inc., Page, AZ
Boulder City Water Sports, Boulder City, NV
Buck Bay Canoes & Kayaks, Bullhead City, AZ
Bullhead City Watercraft Rentals, AZ
Canyoneers, Inc., Flagstaff, AZ
Canyon Explorations, Flagstaff, AZ
Canyon Road Storage, Boulder City, NV
Capt. Dan's Charters, Page, AZ
Champion Rentals, Lake Havasu City, AZ
Colorado River & Trail Expeditions, Inc., Salt Lake City, UT
Copper Cyn Rentals, Lake Havasu City, AZ
Corporate Auto/Marine, Phoenix, AZ
Cross Tours & Explorations, Provo, UT
D and M Sports Shop, Parker, AZ
Del Rio Beach Club, Laughlin, NV
Desert Canoe Rentals, Blythe, CA
Desert River Outfitters, Bullhead City, AZ
Desert River Sports, Bullhead City, AZ
Diamond River Adventures, Page, AZ
Discount Water Sports, Bullhead City, AZ
Lake Powell Limited, Phoenix, AZ
Lake-Time, Page, AZ
Lakeview Boat Storage, Big Water, UT
Laughlin River Tours, Inc., Laughlin, NV

Dixie Bell, Lake Havasu City, AZ
Dolly's Steamboat Cruises, Apache Jct
Doo Powell, Page, AZ
East Side Watersports, Las Vegas, NV
Encanto Boating Co., Phoenix, AZ
Expeditions, Inc., Flagstaff, AZ
Express Jet Ski Rentals, Phoenix, AZ
Fish On Boat Rental, Scottsdale, AZ
Fisherman's Bait & Tackle & Ammo, Lake Havasu City, AZ
Foothills Rental Center, Cave Creek, AZ
Fred's Cycle & Sports, Blythe, AZ
Fun Center Inc., Lake Havasu City, AZ
Fun Time Boat Rentals, Lake Havasu City, AZ
Get It Wet Watercraft, Henderson, NV
Gettin' Wet Watercraft, Inc., Mesa, AZ
Glen Canyon Float Trips, Page, AZ
Goertzen Water Cycle, Lake Havasu City
Good Time Rentals, Phoenix, AZ
Grand Canyon Dories, Inc., Altaville, CA
Grand Canyon Expeditions, Flagstaff, AZ
Grand Canyon Expeditions, Kanab, UT
H2O Houseboat Vacations, Lake Havasu City
Hatch River Expeditions, Inc., Vernal, UT
Havaski Beach Rentals, Lake Havasu City, AZ
Havasu Marina Corp., Lake Havasu City, AZ
Hawley Lake Rentals, McNary, AZ
Hays Rents, Forest Lakes, AZ
High Country Rec., Tucson, AZ
High Desert Adventures, St. George, UT
High Image Marine, Page, AZ
Holiday River Expeditions, Salt Lake City, UT
Hualapai Tribal River Trips & Tours, Peach Springs, AZ
Island Boat Rentals, Lake Havasu City, AZ
J's Watercraft Rentals, Bullhead City, AZ
Jerry's Marine Service, Page, AZ
Jet-N-Ski, Phoenix, AZ
Jet Action Rentals, Tempe, AZ
Jet Rent, Yuma, AZ
Jet Ski MD, Page, AZ
Jet Ski Unlimited, Phoenix, AZ
Jet Sports Unlimited, Phoenix, AZ
Jettco Jet Ski Rentals, Lake Havasu City, AZ
Joey's Watercraft Connection, Phoenix, AZ
John's Watercraft Worx, Bullhead City, AZ
Kayak, Canoe & Boat Rentals, Glendale, AZ
Lake Havasu Boat Tours, Lake Havasu City
Lake Mary Fishing Boat Rentals, Flagstaff, AZ
Lake Mead Resort, Boulder City, NV
Lake Pleasant Watercraft Rentals, Glendale, AZ
Lee's Ferry Anglers, Ltd., Marble Cyn, AZ
Liberty Motorsport, Yuma, AZ
London Bridge Watercraft Rentals, Lake Havasu City, AZ

Lynx Lake Store/Boat Rentals, Prescott AZ
 Marine Abilities, Lake Havasu City, AZ
 Martinez Lake Resort, Yuma, AZ
 MCC Jet Ski Rentals, Peoria, AZ
 McCulloch Properties, Lake Havasu City AZ
 MDX Whitewater Boats, Mesa, AZ
 Mike's Marine Rentals, Henderson, NV
 Mike's Trophy Fishing, Snowflake, AZ
 Moki Mac River Expeditions, Inc., Salt Lake City, UT
 Monte Vista Marine, Inc., Flagstaff, AZ
 Morris Travel, Orem, UT
 Nauti Bouys, Lake Havasu City, AZ
 Northern Arizona Boat Rental, Page, AZ
 O.A.R.S., Inc. Angels Camp, CA
 Oar, Inc., Flagstaff, AZ
 Oceanside Motorsports, Apache Jct, AZ
 Oceanside Water Sport, Apache Jct, AZ
 Old Western Trader, Golden Shores, AZ
 Outdoors Unlimited, Flagstaff, AZ
 Outfitters, Inc., Flagstaff, AZ
 Palm Oasis Rentals, Lake Havasu City, AZ
 Precision Marine, Phoenix, AZ
 Precision Outdoor Power, Tucson, AZ
 Prescott Equip. Rentals /Sales, Prescott AZ
 Primetime Watersport, Bullhead City, AZ
 Professional River, Flagstaff, AZ
 Raft Adventures, Inc., Flagstaff, AZ
 RC Marine, Lake Havasu City, AZ
 Rebel Adventure Tours, Las Vegas, NV
 Recreation Services, Scottsdale, AZ
 Rent-A-Boat, Page, AZ
 Rental World, Tempe, AZ
 Rentor On-Line/USA Watercraft, Bullhead City, AZ
 Resort Boat Rental, Lake Havasu City, AZ
 Rick's Pontoon Boat Rentals, Lake Havasu City, AZ
 River Rat Watersports, Laughlin, NV
 River Rat Wave Rider Rentals, Lake Havasu City, AZ
 River Radness Rentals, Bullhead City AZ
 River Travel Center, Pt. Arena, CA

Riverfront Water Sports, Bullhead City, AZ
 Riverjetz Watercraft & ATV Rentals, Bullhead City, AZ
 Riverside Water Sports, Bullhead City, AZ
 Rocket Rentals, Phoenix, AZ
 Sail Havasu, Lake Havasu City, AZ
 SB Rentals, Parker Dam, AZ
 Scottie's Jet Ski Rentals, Lake Havasu City AZ
 Seven Resorts, Temple Bar, AZ
 Skip's Prop Shop, Lake Havasu City, AZ
 Skipperliner Marine, Page, AZ
 Skylite Boat Rental, Bit Water, UT
 Splash Watercraft Rentals, Bullhead City, AZ
 Starbrite Boat Rentals, Greenhaven, AZ
 Summit Drivers & Water Sports, Flagstaff, AZ
 Sun Country RV Service, Glendale, AZ
 Sunburst Performance, Lake Havasu City, AZ
 Sunrise Peak, Inc., West Jordan, UT
 Sunski Rental, Roosevelt, AZ
 The Boat Brokers, Marble Canyon, AZ
 The Dory Connection, Flagstaff, AZ
 Tincanebitts Taxi Service, Meadview, AZ
 Tom's Water Sports, Henderson, NV
 Total Rentals & Sales Ctr, Flagstaff, AZ
 Tour West, Inc., Orem, UT
 Trophy Trout Towers, Marble Canyon, AZ
 U-Tow, Phoenix, AZ
 Verde River Boat Rides, Camp Verde AZ
 Wahweap Lodge, Page, AZ
 Water Sport Centers, Inc., Lake Havasu City, AZ
 Water Trix - Jet Ski & Quad Rentals, Gilbert, AZ
 Watercraft Adventures, Needles, CA
 Watercraft Beach, Bullhead City, AZ
 Wave Riders Watercraft Rental, Lake Havasu City, AZ
 Western River Expeditions, Salt Lake City, UT
 Wet & Wild, Bullhead City, AZ
 Wet Ski Jet Ski Shop, Glendale, AZ
 White Magic Unlimited, Mill Valley, CA
 Wild Wave Rentals, Kanab, UT
 Willow Beach Harbor, Willow Beach, AZ

NAME	ADDRESS	TELEPHONE
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

10.3 Agreement of the Agencies

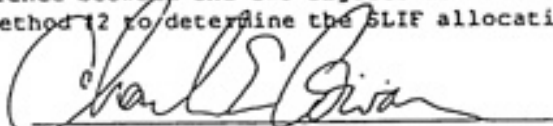
EXHIBIT 6.4

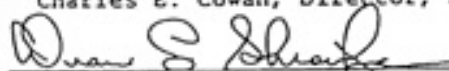
AGREEMENT OF THE AGENCIES

For the first time in the history of the Arizona Watercraft Survey, the study included a cross-check of boaters' estimates of fuel purchased from marinas with marinas' estimates of fuel sold. The check revealed a significant difference between the two estimates. The impact of this discrepancy on allocations from the Highway Users Revenue Fund to the State Lake Improvement Fund (SLIF) would be substantial. If we base our calculations on the boaters' estimates of fuel purchased, the SLIF allocation would be 2.0395 percent or approximately \$6 million annually. However, if we base our calculations on the marinas' estimates of fuel sold, the SLIF allocation would be .9576 percent or approximately \$3 million annually. Therefore, until the next regular survey in 1994 we have agreed to continue payments to the SLIF at 1.4 percent, the rate established by the 1988 watercraft survey and used for fiscal years 1988, 1989, and 1990.

State law requires that motor fuel taxes collected be deposited in the funds reflecting where the taxes were earned. The watercraft survey is intended to determine where these taxes are earned. Consequently, we have agreed that the 1994 survey must be designed to obtain the most accurate data possible, and we will fund the survey at the amount required to obtain this data. We believe an improved survey design will reduce or eliminate the discrepancy between the boaters' and the marinas' estimates

In any case, if the improved survey design does not significantly reduce the discrepancy, we have agreed to resolve the difference by using one of two methods which are shown on the attachment. We will compare boaters' estimates of marina fuel purchases and marinas' estimates of fuel sales. If the difference between the two figures is 25 percent or less, method #1 will be used to calculate the SLIF allocation; if the difference between the two figures is more than 25 percent, we will use method #2 to determine the SLIF allocation.


Charles E. Cowan, Director, ADOT


Duane L. Shroufe, Director, Game & Fish


Kenneth E. Travous, Director, State Parks

ATTACHMENT TO THE AGREEMENT OF THE AGENCIES:
PROCEDURES FOR CALCULATING THE SLIF ALLOCATION

Variables (In gallons)

- A = Boaters' reports of marina fuel purchases
- B = Marinas' reports of fuel sales
- C = Boaters' reports of non-marina fuel purchases
- D = Commercial and government reports of watercraft fuel purchases
- E = Total gasoline sales on which Arizona tax was paid

Step 1: Compare Variables A and B.

- If A divided by B is 1.25 or less, use Formula #1.
- If A divided by B is more than 1.25, use Formula #2.

Step 2: Calculate SLIF Percentage.

Method #1:

$$(A + C + D) + E = \text{SLIF Percentage}$$

Method #2:

$$([B + D + (C \times B/A)] + E) \times 1.25 = \text{SLIF Percentage}$$